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DOMESTIC COAL INDUSTRY

HEARING

BEFORE THE

SUBCOMMITTEE ON NATURAL RESOURCES
DEVELOPMENT AND PRODUCTION

OF THE

COMMITTEE ON
ENERGY AND NATURAL RESOURCES
UNITED STATES SENATE

NINETY-NINTH CONGRESS

SECOND SESSION

ON THE

IMPACT OF COAL AND ELECTRICITY IMPORTS ON THE DOMESTIC COAL INDUSTRY

MAY 1, 1986

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DOMESTIC COAL INDUSTRY

THURSDAY, MAY 1, 1986

U.S. SENATE,
SUBCOMMITTEE ON NATURAL RESOURCES
DEVELOPMENT AND PRODUCTION,
COMMITTEE ON ENERGY AND NATURAL RESOURCES,
Washington, DC.

The subcommittee met, pursuant to notice, at 10:10 a.m. in room SD–366, Dirksen Senate Office Building, Hon. John W. Warner presiding.

Present: Senators Warner, Hecht, Bumpers, Ford, and Rockefeller.

Also present: Patrick Sullivan, professional staff member; and Patricia J. Beneke, counsel for the minority.

OPENING STATEMENT OF HON. JOHN W. WARNER, A U.S. SENATOR FROM THE STATE OF VIRGINIA

Senator WARNER. Today the Subcommittee on Natural Resources Development and Production will hear testimony from the administration, the coal industry panel, and a panel from the utility industry on the impact of coal and electricity imports into the United States on our domestic coal industry.

Last year, the subcommittee held a similar hearing on coal imports and the potential impact on foreign-purchased coal on our domestic industry. At that time, imports were speculated to penetrate the domestic industry and displace American workers.

The Department of Commerce outlined a worst-case scenario in their 1985 report which stated that there was a possibility of 17.7 million tons of foreign coal entering U.S. markets. Data released by the Energy Information Administration report earlier this month now estimates that a maximum displacement of 4.8 million tons of coal will occur by 1995.

The report is the product of the National Coal Imports Reporting Act of 1985, legislation which was introduced last year by my Senate colleagues, Senator Byrd, Senator Rockefeller, Senator Ford, and myself that directed the EIA to prepare an indepth analysis of coal imports into the United States to put to rest widespread speculation of enormous coal imports into the United States from foreign suppliers.

Although coal imports seem to be far less than what was reported last year, any coal imported in the United States is a cause for concern. How can we sit idly by when coal can be transported from a foreign country halfway around the world in some instances and

compete with domestic coal sources located only miles away from the points of use? This is indeed a problem.

Here at home, we must address such factors as high production costs, compliance costs for pre- and post-environmental regulations, rail rates, inland waterway costs, utility procurement practices, tax and royalty schedules, and last but certainly not least by any stretch of the imagination, acid rain controls.

The future impacts of foreign coal imports on domestic production and employment could be serious if we just stand by and let it happen. I believe we must examine all factors which inhibit U.S. ability to compete in the world coal market.

Internationally, we must look at the dollar exchange rates, cost of capital, tax and subsidies, transportation rates, structure of the foreign coal export industry, and as we are experiencing quite dramatically this year oil and gas price fluctuations. Any change in these factors can and are having pronounced impacts on our domestic competitive posture.

It has long been a high priority of this Senator to diligently work toward a healthy U.S. coal industry. I have been fortunate to work along with many others with equal dedication here in the Senate. We must constantly be searching for new and better ways to mine, transport, and burn coal more cleanly and efficiently.

I have a statement from Senator Byrd which will appear at this point in the record.

[The prepared statement of Senator Byrd follows:]

TESTMONY

TESTIMONY OF SENATOR ROBERT C. BYRD
BEFORE THE SUBCOMMITTEE ON
NATURAL RESOURCES DEVELOPMENT AND PRODUCTION,
SENATE COMMITTEE ON ENERGY AND NATURAL RESOURCES,
MAY 1, 1986

U.S. COAL IMPORTS AND THE AMERICAN COAL INDUSTRY

MR. BYRD:

MR. CHAIRMAN, LET ME COMMEND YOU FOR HOLDING THESE HEARINGS ON THE IMPACT OF COAL IMPORTS ON THE DOMESTIC COAL INDUSTRY. IT IS SOMETHING OF AN ODDITY THAT SUCH A HEARING SHOULD BE NEEDED AT ALL, CONSIDERING THE FACT THAT COAL IS THIS NATION'S MOST ABUNDANT ENERGY RESOURCE. YET IN 1985 THE UNITED STATES IMPORTED 2.0 MILLION TONS OF COAL, NEARLY TWICE THE LEVELS OF 1983 AND 1984. RELATIVE TO THE LEVELS OF DOMESTIC COAL CONSUMPTION AND PRODUCTION, THESE LEVELS OF COAL IMPORTS ARE NOT LARGE ENOUGH TO BE OF SERIOUS CONCERN. HOWEVER, I AM SURE YOU SHARE MY CONCERN THAT COAL IMPORTS FROM SUCH NATIONS AS COLOMBIA MAY BE THE HARBINGER OF A GREATER RELIANCE ON IMPORTED COAL IN THE FUTURE. WE SHOULD RECALL THAT IN 1960 FOREIGN IMPORTS OF AUTOMOBILES ACCOUNTED FOR ONLY 7.5 PERCENT OF THE U.S. MARKET. TEN YEARS LATER FOREIGN AUTOMOBILE IMPORTS HAD CAPTURED 15.7 PERCENT OF THE U.S. AUTO MARKET AND, IN 1985, 25.7 PERCENT OF OUR MARKET.

WE SHOULD RECOGNIZE THAT THE UNITED STATES REPRESENTS A LARGE AND ATTRACTIVE MARKET TO FOREIGN COAL PRODUCERS, PARTICULARLY BECAUSE OF THE EXCESS WORLD COAL PRODUCTION CAPACITY IN MANY OF THE COAL-PRODUCING NATIONS, WHICH CREATES ECONOMIC INCENTIVES TO SEEK NEW MARKETS TO REDUCE THAT EXCESS PRODUCTIVE CAPACITY. CONSEQUENTLY, FOREIGN COAL IMPORTS COULD CAPTURE A LARGER AND LARGER SHARE OF THE AMERICAN COAL MARKET OVER THE NEXT TEN YEARS.

IN FACT, MR. CHAIRMAN, A STUDY BY THE DEPARTMENT OF COMMERCE PUBLISHED IN APRIL OF 1985, ENTITLED POTENTIAL FOR U.S. STEAM COAL IMPORTS, INDICATED THAT THE POTENTIAL U.S. MARKET FOR FOREIGN STEAM COAL IMPORTS COULD BE AS HIGH AS 17.7 MILLION TONS BY 1990. IF THAT POTENTIAL WERE REALIZED, AND DOMESTIC UTILITY COAL WERE DISPLACED, THE ECONOMIC IMPLICATIONS COULD BE SERIOUS FOR THE DOMESTIC COAL INDUSTRY, ESPECIALLY IN COAL-PRODUCING STATES SUCH AS WEST VIRGINIA.

MR. CHAIRMAN, YOU HELD A HEARING ON THIS SUBJECT ALMOST ONE YEAR AGO AT WHICH I SUGGESTED THAT THE CONGRESS MUST HAVE PERTINENT INFORMATION ABOUT THE ECONOMIC AND EMPLOYMENT IMPACTS OF FOREIGN COAL IMPORTS ON THE DOMESTIC COAL INDUSTRY. IN THAT REGARD, I SPONSORED LEGISLATION WHICH DIRECTED THE ENERGY INFORMATION ADMINISTRATION TO CONDUCT AN ASSESSMENT OF THE POTENTIAL DOMESTIC MARKETS FOR FOREIGN COAL IMPORTS. EARLIER THIS MONTH THE EIA ISSUED ITS REPORT, OUTLOOK FOR U.S. COAL IMPORTS, WHICH ESTIMATES POTENTIAL

FUTURE U.S. COAL IMPORTS IN 1995, AND THE IMPLICATIONS OF THOSE IMPORTS FOR THE COAL INDUSTRY AND THE ECONOMIES OF COAL-PRODUCING STATES.

ACCORDING TO THE REPORT, IN 1995, THE UNITED STATES COULD IMPORT 4.8 MILLION TONS OF COAL FROM COLOMBIA, CANADA, AND AUSTRALIA--MORE THAN DOUBLE THE CURRENT LEVEL OF COAL IMPORTS. OF THESE THREE COAL-PRODUCING NATIONS, THE SOUTH AMERICAN NATION OF COLOMBIA HAS THE GREATEST POTENTIAL TO EXPAND ITS MARKETS IN THE UNITED STATES. EIA ESTIMATES, FOR EXAMPLE, THAT OF THE 4.8 MILLION TONS OF COAL IMPORTS IN 1995, COLOMBIAN COAL COULD ACCOUNT FOR 60 PERCENT. UNDER CERTAIN CIRCUMSTANCES, ACCORDING TO EIA, COAL IMPORTS COULD BE AS HIGH AS 7.7 MILLION TONS IN 1995, WITH COLOMBIA ACCOUNTING FOR OVER 75 PERCENT OF THE TOTAL.

THE DEPARTMENT OF COMMERCE REPORT INDICATED THAT THE POTENTIAL UTILITY MARKET FOR COLOMBIAN COAL IN THE UNITED STATES COULD BE AS HIGH AS 15 MILLION TONS BY 1990. ACCORDING TO THE REPORT, COLOMBIA HAS THE POTENTIAL TO BECOME A MAJOR SUPPLIER TO ELECTRIC UTILITY PLANTS ALONG THE EAST COAST, THE GULF COAST, AND IN THE MIDWEST. MR. CHAIRMAN, THESE ESTIMATES SUGGEST THAT COLOMBIA'S MAJOR EXPORTS TO THE UNITED STATES COULD BE CHARACTERIZED AS THE THREE "C'S": COFFEE, COCAINE--AND NOW COAL.

IT IS IMPORTANT TO NOTE THAT THE EAST COAST UTILITY MARKET IS AN IMPORTANT MARKET FOR COAL PRODUCERS FOR APPALACHIAN COAL STATES, SUCH AS MY STATE OF WEST VIRGINIA. INDEED, COAL CONSUMPTION IN THE EAST COAST UTILITY MARKET,

WHICH ACCOUNTS FOR NEARLY 30 PERCENT OF U.S. UTILITY COAL CONSUMPTION, AND ABOUT 15.8 MILLION TONS IN 1984 (24 PERCENT) OF THE 65.6 MILLION TONS OF WEST VIRGINIA COAL CONSUMED IN THE U.S. THIS IS, IN OTHER WORDS, A MARKET OF PARTICULAR SIGNIFICANCE FOR WEST VIRGINIA. THUS, TO THE EXTENT THAT FOREIGN COAL IMPORTS FROM COLOMBIA OR OTHER COAL-PRODUCING NATIONS DISPLACE WEST VIRGINIA COAL, MY STATE WILL SUFFER.

MR. CHAIRMAN, COLOMBIA IS OF PARTICULAR CONCERN, PRIMARILY BECAUSE OF THE NEW EL CERREJON SURFACE MINE WHICH BEGAN PRODUCTION LAST YEAR. THIS MINE IS ONE OF THE LARGEST SURFACE MINES IN THE WORLD WITH ESTIMATED RESERVES OF ABOUT 1.75 BILLION TONS OF HIGH QUALITY STEAM COAL, SOME OF THE SEAMS OF WHICH ARE 35 FEET THICK. THE MINE HAS A PRODUCTIVE CAPACITY OF 16.5 MILLION TONS PER YEAR.

THE EL CERREJON MINE IS A $3.2 BILLION JOINT VENTURE BETWEEN THE EXXON CORPORATION AND THE COLOMBIAN GOVERNMENT, AND WAS PROVIDED SUBSTANTIAL ASSISTANCE FROM THE U.S. EXPORT-IMPORT BANK. ACCORDING TO A REPORT PREPARED BY THE DEPARTMENT OF COMMERCE AND THE DEPARTMENT OF INTERIOR, ENTITLED U.S. AND COLOMBIAN COAL MINES, COLOMBIAN SURFACE-MINED COAL MAY ENJOY A MINE-MOUTH PRODUCTION COST ADVANTAGE OF AS MUCH AS 20 PERCENT OVER DOMESTIC COAL PRODUCED FROM U.S. SURFACE MINES. THIS COULD PROVIDE A SIGNIFICANT COMPETITIVE ADVANTAGE TO COLOMBIAN COAL IN THE WORLD COAL MARKET. SINCE THE TOTAL PRODUCTIVE CAPACITY OF THE MINE IS DEDICATED TO THE EXPORT MARKET, WITH WESTERN EUROPE AS THE

PRIMARY MARKET, AND THE UNITED STATES THE SECONDARY MARKET, COLOMBIAN COAL DEVELOPMENT REPRESENTS A MAJOR SOURCE OF COMPETITION TO U.S. COAL PRODUCERS FOR DOMESTIC UTILITY COAL MARKETS AND UTILITY MARKETS IN WESTERN EUROPE.

MR. CHAIRMAN, THE DOMESTIC COAL INDUSTRY IS FACING DOUBLE TROUBLE. NOT ONLY HAVE FALLING OIL PRICES CAST A CLOUD OF UNCERTAINTY OVER THE FUTURE FOR DOMESTIC COAL USE, BUT INCREASED COMPETITION FROM OTHER COAL-PRODUCING NATIONS FOR WORLD STEAM COAL MARKETS, AND THE RESTRUCTURING OF THE WORLD STEEL INDUSTRY, ALSO HAVE CAST A CLOUD OF DOUBT OVER THE FUTURE OF COAL EXPORTS.

ONE EFFECT OF SUCH MARKET CONDITIONS IS TO BURDEN THE AMERICAN COAL INDUSTRY WITH ABOUT 100 MILLION TONS OF UNUSED PRODUCTION CAPACITY. TO THE EXTENT THAT FOREIGN COAL IMPORTS DISPLACE U.S. COAL IN DOMESTIC AND OVERSEAS MARKETS, THE U.S. COAL INDUSTRY WILL CONTINUE TO BEAR THIS BURDEN. THE DISPLACEMENT BY FOREIGN COAL IMPORTS OF SIGNIFICANT AMOUNTS OF COAL PRODUCED IN THE APPALACHIAN COALFIELDS WILL COST THE JOBS OF COAL MINERS IN SUCH STATES AS WEST VIRGINIA, AND WILL HAVE A NEGATIVE EFFECT ON THE ECONOMIES OF COMMUNITIES WHICH DEPEND UPON COAL PRODUCTION FOR THEIR LIVELIHOOD. THIS WILL ONLY ADD TO THE CURRENT ECONOMIC BURDENS IN MANY OF THE COAL STATES SUCH AS WEST VIRGINIA, AND CAST A PALL OVER THE FUTURE OF SUCH STATES.

IN ORDER TO CONFRONT THIS PROBLEM HEAD-ON, I HAVE JOINED MY DISTINGUISHED COLLEAGUE FROM WEST VIRGINIA, SENATOR ROCKEFELLER, AS A COSPONSOR OF LEGISLATION WHICH

ESTABLISHES A NATIONAL COAL IMPORTS POLICY. THIS LEGISLATION, "THE COAL TRADE EQUALIZATION ACT" (S 2356), WOULD IMPOSE A DUTY OF $8 PER TON ON COAL IMPORTS. ENACTMENT OF SUCH A DUTY WOULD BE A MAJOR STEP FORWARD IN PREVENTING THE SLIDE OF APPALACHIAN COAL-PRODUCING STATES INTO FURTHER ECONOMIC DECLINE AS THE RESULT OF COAL IMPORTS, PARTICULARLY COAL FROM COLOMBIA.

MR. CHAIRMAN, THAT CONCLUDES MY FORMAL REMARKS. BUT LET ME CLOSE BY COMMENDING YOU AGAIN FOR YOUR LEADERSHIP IN THIS AREA WHICH AFFECTS AN INDUSTRY OF SUCH IMPORTANCE TO THE ECONOMIES OF OUR STATES, AS WELL AS THE ENERGY FUTURE OF THE NATION.

Senator WARNER. The record for this hearing will remain open for a period of 2 weeks so that other written statements may be submitted and to permit those testifying today to respond to written questions that may be submitted subsequently.

Senator Ford.

Senator FORD. Mr. Chairman, I have no statement. I am not on the subcommittee, and you have always been very kind to me by asking me to come and be a part of your hearings because it relates to coal, and we have so much in common here. I do appreciate the opportunity, and thank you very much.

Senator WARNER. Thank you, Senator.

Senator Rockefeller.

STATEMENT OF HON. JOHN D. ROCKEFELLER IV, A U.S. SENATOR FROM THE STATE OF WEST VIRGINIA

Senator ROCKEFELLER. Thank you, Mr. Chairman.

As usual, your leadership on coal issues is strong and noticeable. As I mentioned to you a few days ago, I was in southwestern Virginia and people down there—that is coal country in Virginia—and people down there were talking about you then, as I assume they always do, with great respect for your leadership on many issues. But today your interest is in coal imports and electricity imports, and those are obviously two areas that really bear extremely close watching.

Mr. Chairman, over the last 2 years, we have come to recognize that among the threats facing our coal industry, imports of coal into the United States are growing in severity. As such, the Congress has asked for a more precise study and monitoring of this situation.

The combination of an intensely competitive marketplace and a new source of coal in this hemisphere has caused serious concern about coal imports into the United States. Two Government studies have concluded that coal imports will continue to grow and that electrical utilities have shown increasing interest in foreign supplies.

It is my guess that these studies may seriously understate the impending problem. I believe that utilities have and will increasingly attempt to use coal imports or the threat of coal imports to their negotiating advantage. In an environment of excessive rail rates, increased coal imports, whether for price or negotiating position, are virtually guaranteed.

Mr. Chairman, the coal industry in the United States of America is absolutely vital to our country. It is vital to a healthy industrial base, and to our electric utility industry. Obviously, a healthy coal economy is also imperative to your State of Virginia, my State of West Virginia, and to the rest of Appalachia.

I do not think that we should or can wait for coal imports to become any more of a problem before we here in Congress take action. We should and we must act quickly to stem the tide of imports before they come ashore.

We should and we must learn from the experience of other industries which have seen a trickle of imports grow to undermine their basic health. I am thinking of course of steel. We should and

we must recognize that even imports that in the aggregate appear like a small percentage of U.S. production now will steal away some of the most promising new and expanding markets from West Virginian and Appalachian coal producers.

Florida, the gulf coast, and States up and down the east coast are those that are in fact targeted for foreign coal. Jacksonville Electric, Florida Power, New England Electric, and, yes, even Virginia Power in the heart of coal country, have either test-burned or have written contracts for foreign coal.

It is almost inconceivable that the United States, possessing fully 25 percent of the world's coal reserves, would consider importing coal, and incomprehensible that domestic rail transportation rates are so high that we lose in a competition between domestic coal and foreign imports.

Furthermore, it is absolutely appalling that the greatest threat would come from a mine operation run by America's largest corporation, our largest corporation, the Exxon Corp.

Mr. Chairman, I doubt that any legislation is going to completely stop coal imports. Yet I do think that we must act. Accordingly, I have sponsored S. 2356 that would impose an $8-per-ton tariff on the importation of coal. I have also cosponsored Senator Ford's bill, S. 946, that would prohibit grants of domestic Federal coal leases to any company engaged in the development of coal resources for import into the United States.

With all due respect, Mr. Chairman, to some of the experts we will hear from today, we must continue to press forward with our concern on this issue, and not be lulled to sleep by one snapshot statistical prediction of imports.

Mr. Chairman, one final word. In addition to the coal imports' situation, I know that you are also very concerned that we must pay an increasing amount of attention to the imports of electric power from Canada. For years, utilities on our northeastern borders have had a healthy relationship with Canadian utilities for supplies of power to meet peaking and special need.

In the last 10 years, however, the same utilities seem to have become addicted to Canadian supplies in the absence of developing their own capacity, or continuing effort to convert existing oil capacity to coal.

Mr. Chairman, I know that your staff tried to get an administration witness to discuss electric power imports from Canada for this hearing, or in general, but apparently such a witness was not available. I am therefore particularly grateful for your leadership, Chairman Warner, on this issue because I think it is life and death for Appalachia.

I thank the chairman.

[The prepared statement of Senator Rockefeller follows:]

OPENING STATEMENT
SENATOR JOHN D. ROCKEFELLER IV
SUBCOMMITTEE ON NATURAL RESOURCES DEVELOPMENT
AND PRODUCTION
COMMITTEE ON ENERGY AND NATURAL RESOURCES
UNITED STATES SENATE
MAY 1, 1986

MR. CHAIRMAN:

I am grateful that you have called these hearings. Your fine leadership on coal issues is always welcome. The subject of today's hearing -- coal imports and electricity imports -- are two issues which merit careful attention and a watchful eye.

Mr. Chairman, over the last two years we have come to recognize that among the threats facing the coal industry, imports of coal into the United States are growing in severity. As such, the Congress has asked for more precise study and monitoring of the situation.

The combination of an intensely competitive marketplace and a new source of coal in this hemisphere has caused serious concern about coal imports into the United States. Two government studies have concluded that coal imports will continue to grow and electric utilities have shown increasing interest in foreign supplies.

It is my guess that these studies may seriously understate the impending problem. I think that utilities have and will increasingly attempt to use coal imports or the threat of coal

imports to their negotiating advantage. In an environment of excessive rail rates, increased coal imports -- whether for price or negotiating position -- are virtually guaranteed.

Mr. Chairman, the coal industry in the United States is absolutely vital to our country, to a healthy industrial infrastructure and to our electric utility industry. Obviously, a healthy coal economy is also imperative to my state and to the rest of Appalachia.

I don't think we should or can wait for coal imports to become any more of a problem before we take action. We should and we must act now to stem the tide of imports before they come ashore.

We should and we must learn from the experience of other industries which have seen a trickle of imports grow to undermine their basic health. We should and we must recognize that even imports that in the aggregate appear like a small percentage of U.S. production, will steal away some of the most promising new and expanding markets from West Virginian and Appalachian coal producers.

Mr. Chairman, Florida, the Gulf Coast, and areas up and down the East Coast -- are those targetted for foreign coal. Jacksonville Electric and Florida Power, New England Electric,

even Virginia Power in the heart of coal country, either have test burned or have written contracts for foreign coal.

It is almost inconceivable that the United States, possessing fully 25% of the world's coal reserves, would consider importing coal and incomprehensible that domestic rail transportation rates are so high that we lose in a competition between domestic coal and foreign imports. Furthermore, it is absolutely appalling that the greatest threat would come from a mine operation run by America's largest corporation, Exxon.

Mr. Chairman, I doubt that any legislation can completely stop coal imports. Yet I think we must act. Accordingly, I have sponsored S. 2356, that would impose an $8 per ton tariff on the importation of coal. I have also cosponsored Senator Ford's bill, S. 946, that would prohibit grants of domestic federal coal leases to any company engaged in the development of coal resources for import into the United States.

With all due respect to some of the experts we will hear from today, we must continue to press forward with our concern on this issue and not be lulled to sleep by one snap-shot statistical prediction of imports. Producers of foreign coal have unmistakably targetted some of our coal markets. We cannot be indecisive for very long, allowing our coal industry to sit in the cross-hairs -- we must react now.

Mr. Chairman, in addition to the coal imports situation, I think we must also pay an increasing amount of attention to the imports of electric power from Canada. For years, utilities on our Northern borders have had a healthy relationship with Canadian utilities for supplies of power to meet peaking and special needs. In the last ten years, however, these same utilities seem to have become addicted to Canadian supplies in the absence of developing their own capacity, or continuing efforts to convert existing oil capacity to coal. In all, the imports of electricity represent substantial lost opportunities for American coal, especially Appalachian coal.

Obviously, we can expect to continue some reliance on Canadian electric imports far into the future, but we should not do so to the excess. It is a very complicated matter, and a matter on which this committee should focus more attention.

Mr. Chairman, I know your staff tried to get an Administration witness to discuss electric power imports for this hearing -- but apparently such a witness was not available. I think just this very fact underscores the need for us to maintain our attention to the matter and to step up the effort the Energy Department has underway to study the issue.

Again I want to thank you for holding these hearings and for your attention to these important issues.

Senator WARNER. I thank the Senator from West Virginia. He has indeed joined this committee with a background and knowledge of this industry which is very helpful as we work our way through this legislative challenge that we have to try and save our industry. I value our friendship and our working relationship.

Senator Hecht.

Senator HECHT. Thank you, Mr. Chairman.

I have no formal statement, but I commend you on these hearings. It is not just your State, but it is so very important to the entire country, and international events of the past few days have taken on a new significance for coal. Thank you.

Senator WARNER. Yes, Senator. I would say, out of tragedy has risen challenge for the coal industry. Let us hope this whole issue can be examined dispassionately and rationally before any decisions are made.

Now we are going to have on the first panel, Michael T. Kelley, Deputy Assistant Secretary for Basic Industries, U.S. Department of Commerce; and Dr. Hermann Enzer, Assistant Director, Minerals Data Analysis, Bureau of Mines, U.S. Department of Interior.

Gentlemen, we welcome you.

We also welcome Dr. Yancik. Mr. Kelley, will you lead off.

STATEMENT OF MICHAEL T. KELLEY, DEPUTY ASSISTANT SECRETARY, BASIC INDUSTRIES, INTERNATIONAL TRADE ADMINISTRATION, DEPARTMENT OF COMMERCE, ACCOMPANIED BY DR. JOSEPH YANCIK, HEAD OF THE OFFICE OF ENERGY, BASIC INDUSTRIES SECTOR, INTERNATIONAL TRADE ADMINISTRATION

Mr. KELLEY. Mr. Chairman, members of the subcommittee, I am Michael T. Kelley, Deputy Assistant Secretary for Basic Industries in the International Trade Administration. On my right is Dr. Joseph Yancik, who is the head of the Office of Energy, Basic Industries Sector, International Trade Administration; and on my left is Dr. Hermann Enzer, U.S. Bureau of Mines.

Senator WARNER. I am going to ask you to pull that microphone up like you were selling coal somewhere. There are a lot of folks who have come a long way to be here and are anxious to hear what you have to say.

Mr. KELLEY. I am pleased to appear before this subcommittee. Both Dr. Enzer and I both appeared before this committee last June to discuss the results from our ongoing joint study on the potential for coal imports. Today we are reporting on the cost of mining coal in Colombia compared to the United States.

Dr. Enzer and I have separate statements. I will give a synopsis of the study and the general conclusions we drew from the results, and Dr. Enzer will describe the methodology and present the more important differences in mining costs as between the United States and Colombia.

We reported last June that among the coal exporting countries, Colombia with its new exporting mine at El Cerrejon, has the greatest potential to compete with the United States coal producers supplying the utility markets, particularly in the East, Southeast,

and Gulf States. El Cerrejon was shown to have a substantial transportation cost advantage and an apparent advantage in production costs. Our followup study was to determine the mining costs in Colombia and to identify those factors which account for the difference.

You will see in my statement a reference at the bottom to the joint resolution of Congress that brought this study about.

Three mines representative of the Colombia coal industry were analyzed: El Cerrejon, a small mechanized open pit mine and an underground mine. Each was compared to a U.S. mine. The significant conclusions from our study come from the comparison between El Cerrejon and a simulated mine in the United States, for neither small open pit mines nor underground mines in Colombia will be a factor in exporting coal to the United States.

Current mining laws, regulations and operating practices were assumed to remain the same over the life of the mine. Using these assumptions, engineering estimates were made of the capital, equipment, labor, supplies, services, and labor and equipment productivities to arrive at the average cost of production over the useful life of the mine at the designed annual output.

Production costs are combined with land expenses—lease fees and royalties—and tax liabilities using a discounted cash-flow rate of return analysis to derive the average total mine-mouth cost over the life of the mine. Included in our calculations are the incremental costs which would be incurred if the Colombian mines were operated under the United States mine health, safety, and environmental laws and regulations.

The financial analyses were done at two rates of return. The base case was zero percent return, or the break-even point at which invested capital is recovered but no earnings are made on the equity capital. The second case uses a 15-percent return, a rate of return on invested capital that is generally desired for new mining ventures.

First I will give our general conclusions regarding the differences in the costs of mining in Colombia compared to the United States. Then I will conclude with some specific observations on mining costs at El Cerrejon.

In general, we found these differences in the cost structure.

First of all, capital investment per annual ton of production in Colombia is slightly greater than in the United States because delivered prices of mining equipment are higher, and more equipment is needed because of lower labor productivity.

Second, total labor cost per ton of coal produced in Colombia is about 35 percent lower than in the United States despite labor productivities less than one-half of those in the United States. The overall lower wage scales in Colombia more than offset their lower productivity.

Next, land costs in Colombia are less because of lower lease and royalty fees.

Finally, fixed Federal and State tax liabilities in Colombia are significantly less than in the United States. The absence of property, severance, black lung, and reclamation taxes in Colombia give them a decided cost advantage when profit margins are small. This is a significant cost advantage over U.S. mines in the current do-

mestic and international coal markets because of depressed coal prices.

Finally, mining safety, health, and environmental costs in Colombia are essentially zero except where mine management voluntarily agrees to establish such programs as was done at El Cerrejon. If modern Colombia surface mines were operated under United States health, safety, and environmental standards the added cost would be approximately $1 per ton. This additional cost would not appreciably change Colombia's approximately 15-percent overall cost advantage over similar United States mining operations.

We also examined in detail the respective mine-mouth costs for the two partners in El Cerrejon, Intercor and Carbocol, as their joint venture agreement allocates certain costs. In this analysis, we assumed that Intercor internally financed one-half of its capital, while Carbocol used only debt financing. Under these conditions, the financial analysis resulted in these findings:

At the break-even point, or zero return on capital, Intercor has a slight cost advantage over Carbocol. Although Intercor pays a royalty fee to Carbocol for its one-half of the coal mined, this payment is offset by Carbocol's interest payment on the debt. Both partners have a slight cost advantage over a comparable U.S. mine.

As the rate of return rises, Carbocol gains an increasing cost advantage over Intercor because of the leverage provided by debt when the rate of return exceeds the loan interest rate.

Colombian tax policies share the risk of mining ventures when market prices are depressed in exchange for more substantial tax revenues when coal prices are higher and profit margins increase.

And finally, no evidence was found to indicate that the Colombian or State governments are providing direct subsidies to El Cerrejon.

In conclusion, Mr. Chairman, we believe that the mining cost methodology used in this study is a sound approach for determining both the structural and specific cost differences between foreign and U.S. mines. This capability is very important in assessing the competitiveness of U.S. coal in international markets, as mine-mouth costs are anywhere from 50 to 70 percent of delivered costs.

Although our study illustrates the basic cost competitiveness of United States and Colombian coal at the mine mouth, additional analyses are required to determine our industry's relative competitiveness in specific domestic and international markets. Other cost factors have to be taken into account such as the quality of coal, marketing, and sales expenses, and transportation costs. Further, these analyses must be mine and market specific to give the meaningful comparisons.

Mr. Chairman, I would appreciate if Dr. Enzer could give his statement before we respond to questions.

Senator WARNER. Without objection, we will proceed with Dr. Enzer.

[The prepared statement of Mr. Kelley follows:]

STATEMENT

MICHAEL T. KELLEY
DEPUTY ASSISTANT SECRETARY
BASIC INDUSTRIES
INTERNATIONAL TRADE ADMINISTRATION
U.S. DEPARTMENT OF COMMERCE
May 1, 1986

Before the
Senate Committee on Energy and Natural Resources
Subcommittee on Natural Resources Development and Production

Mr. Chairman and Members of the Subcommittee, I am Michael T. Kelley, Deputy Assistant Secretary for Basic Industries in the International Trade Administration. I am pleased to appear before this subcommittee with Dr. Herman Enzer. We both appeared before this Committee last June to discuss the results from our ongoing joint study on the potential for coal imports. Today, we are reporting on the costs of mining coal in Colombia compared to the United States.

Dr. Enzer and I have separate statements. I will give a synopsis of the study and the general conclusions we drew from the results. Dr. Enzer will describe the methodology and present the more important differences in mining costs between the United States and Colombia.

We reported last June, that among the coal exporting countries, Colombia with its new export mine, El Cerrejon, has the greatest potential to compete with U.S. coal producers supplying the utility market, particularly in the east, southeast and gulf states. El Cerrejon was shown to have a substantial transportation cost advantage and an apparent advantage in production costs. Our follow-up study was to determine the mining costs in Colombia and identify those factors which account for the difference.(1)

Three mines representative of the Colombian coal industry were analyzed: El Cerrejon, a small mechanized open pit mine and an underground mine. Each was compared to a U.S. mine. The significant conclusions from our study come from the comparison between El Cerrejon and a simulated mine in the United States, for neither small open pit mines nor underground mines in Colombia will be a factor in exporting coal to the United States.

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(1) "A Cost Comparison of Selected U.S. and Colombian Coal Mines" is the second part of a two part study requested by the House Appropriations Committee in the Continuing Resolution for FY 1985 (H.J. Res. 648). The first study, "The Potential for U.S. Steam Coal Imports," was completed in April 1985.

Current mining laws, regulations and operating practices were assumed to remain the same over the life of the mine. Using these assumptions engineering estimates are made of the capital, equipment, labor, supplies, services, and labor and equipment productivities to arrive at an average cost of production over the useful life of the mine at the designed annual output.

Production costs are combined with land expenses (lease fees and royalties) and tax liabilities, using a discounted cash flow rate of return analysis to derive the average total mine-mouth cost over the life of the mine. Included in our calculations are the incremental costs which would be incurred if the Colombian mines were operated under U.S. mine health, safety and environmental laws and regulations.

The financial analyses were done at two rates of return. The base case was zero percent return, or the breakeven point, at which invested capital is recovered, but no earnings are made on the equity capital. The second case used fifteen percent return, a rate of return on invested capital that is generally desired for a new mining venture.

First I will give our general conclusions regarding the differences in the costs of mining in Colombia compared to the United States. Then I will conclude with some specific observations on mining costs at El Cerrejon.

In general, we found these differences in cost structure:

Capital investment per annual ton of production in Colombia is slightly greater than in the United States, because delivered prices of mining equipment are higher and more equipment is needed because of lower labor productivity.

Total labor cost per ton of coal produced in Colombia is about 35 percent lower than in the U.S. despite labor productivities less than one-half those in the States. The overall lower wage scales in Colombia more than offset the lower productivity.

Land costs in Colombia are less, because of lower lease and royalty fees.

Fixed federal and state tax liabilities in Colombia are significantly less than in the United States. The absence of property, severance, black lung, and reclamation taxes in Colombia give them a decided cost advantage when profit margins are small. This is a significant cost advantage over U.S. mines in the current domestic and international coal markets because of depressed coal prices.

Mining safety, health, and environmental costs in Columbia are essentially zero except where mine management voluntarily agrees to establish such programs, as done at El Cerrejon. If modern Colombian surface mines were operated under U.S. health, safety, and environmental standards, the added costs would be approximately one dollar per ton. This additional cost would not appreciably change Colombia's approximately 15 percent overall cost advantage over similar U.S. mining operations.

We also examined in detail the respective mine-mouth costs for the two partners in El Cerrejon, Intercor and Carbocal, as their joint venture agreement allocates certain costs. In this analysis, we assumed that Intercor internally financed its half of the capital, while Carbocol used only debt financing. Under these conditions the financial analysis resulted in these findings:

At the breakeven point, or zero return on capital, Intercor has a slight cost advantage over Carbocol. Although Intercor pays a royalty fee to Carbocol for its half of the coal mined, this payment is offset by Carbocol's interest payment on the debt. Both partners have a slight cost advantage over a comparable U.S. mine.

As the rate of return rises, Carbocol gains an increasing cost advantage over Intercor because of the leverage provided by debt when the rate of return exceeds the loan interest rate.

Colombian tax policies share the risk of mining ventures when market prices are depressed in exchange for more substantial tax revenues when coal prices are higher and profit margins increase, and finally,

No evidence was found to indicate that the Colombian or state governments are providing direct subsidies to El Cerrejon.

In conclusion Mr. Chairman, we believe that the mining cost methodology used in this study is a sound approach for determining both the structural and specific cost differences between foreign and U.S. mines. This capability is very important in assessing the competitiveness of U.S. coal in international markets, as mine-mouth costs are anywhere from 50 to 70 percent of delivered costs.

Although our study illustrates the basic cost competitiveness of U.S. and Colombian coal at the mine mouth, additional analyses are required to determine our industry's relative competitiveness in specific domestic and international markets. Other cost factors have to be taken into account, such as the quality of coal, marketing and sales expenses, and transportation costs. Further, these analyses must be mine and market specific to give meaningful comparisons.

Mr. Chairman, I would appreciate if Dr. Enzer could give his statement before we both respond to questions.

STATEMENT OF DR. HERMANN ENZER, ASSISTANT DIRECTOR, MINERAL DATA ANALYSIS, BUREAU OF MINES, DEPARTMENT OF THE INTERIOR

Dr. ENZER. Mr. Chairman, members of the committee, I am pleased to be before you on behalf of the Bureau of Mines.

Instead of reading numbers at you, I brought along three tables which I hope you have in front of you, because I would like to summarize our testimony by using these three tables. I will focus on two cost categories which ought to be of interest; namely, differences in regulatory costs and labor costs between some United States mines and some Colombian mines.

Our approach involved comparing costs at actual mines with similar characteristics in each country, rather than averaging costs across many coal mines in each country. There is the exception of El Cerrejon where we compared the actual mine in Colombia with a large simulated mine in Wyoming.

The first table, which we have labeled exhibit I, has four categories. They are large surface mines, small surface mines, underground mines, and Western U.S. surface mines. You know well that coal production costs vary for many reasons not connected with whether the mines are located in this country or in Colombia.

For instance, the depth of the coal bed below the surface, its angle of dip, its thickness, whether there is one seam or whether there are several seams, and the scale of the operation all affect the size and composition of total costs.

Typically it costs more to mine underground than at the surface. Thus coal from underground mines must have advantages such as higher Btu content or closer proximity to market to compete with surface-mined coal. As an example, if you will look at the table, column 9, you will see a large Powder River basin coal mining operation which has costs of approximately $7.50 per ton, whereas in column 5 the mining cost for a West Virginia mine is approximately $35 per ton.

In the same table, even two similar sized surface mines in the Western United States, columns 7 and 8, face substantial differences in total costs, because one mines multiple seams of coal, and the other mines a single large seam.

In general, underground mines and surface operations mining several thin seams generally incur much higher costs than large surface mines extracting coal from one thick, relatively flat seam.

Because of the unique geology and scale of the El Cerrejon mine, a comparable domestic mine could not be identified, so we simulated a mine in Wyoming. The reason we picked Wyoming was that an actual surface coal mining operation there employs a mining plan similar to El Cerrejon's, though on a smaller scale. Also the management of the company was willing to cooperate with our study, and part 1 of the report which the Commerce Department submitted about a year ago determined that Montana and Wyoming could be the coal producing States most affected by Colombian imports.

If you look at the second table, exhibit II, you will find a listing of the activities required by U.S. health, safety, and environmental

regulations which we could separate. It shows an estimated cost on a per ton basis.

The first two columns in the top left portion of the exhibit cover the large surface mine comparisons between El Cerrejon and the United States equivalent. The main difference is that the United States mine pays black lung and reclamation taxes, and El Cerrejon does not. The other costs in the El Cerrejon column are based on the statement by the two partners that they planned to operate the mine under United States regulations.

The two columns in the top right portion of exhibit II estimate the regulatory costs at a small surface mine in West Virginia, and what these costs would be for the small Colombian surface mine were it subject to United States regulations. The actual costs at the Colombian mine are zero, so the actual costs in the right-hand column are really zeros. We could find no regulations applying to Colombian surface mines, so the costs in this column are estimates of what the additional costs would be at this mine were it to engage in the activities required by United States regulations. Regulatory activities would cost more at the Colombian surface mine than at the West Virginia surface mine mostly because the Colombian mine would have to acquire extra equipment and labor to perform reclamation activities that the West Virginia mines can contract out to a reclamation specialist.

The two columns at the bottom of exhibit II estimate the regulatory costs at an underground mine in West Virginia and what these costs would be were the Colombian underground mine effectively regulated. No regulatory costs were attributed to the underground Colombian mine though the Colombian mining industry has published a 39-page document setting forth health and safety regulations for the extraction of underground coal. Many of the regulations described within the Colombian document are as strict as United States mining regulations, but we could find no evidence that regulations applying to Colombian underground mines were enforced. The costs in the Colombian column estimate what the additional cost would be at the mine were it to engage in the activities required by United States regulations.

The regulatory activities would cost more at the Colombian mine than at the West Virginia mine mostly because the Colombian mine would have to add substantial ventilation equipment, roof support, and safety modifications to its long-wall mining system.

In summary, regulatory costs were found to be 4 percent of total mine-mouth cost at the United States surface mines, 14 percent at the United States underground mine, 2 percent at El Cerrejon, and zero in the other Colombian mines.

The last table compares labor costs and consists of two columns. The first column shows the average wages and fringe benefits for production and maintenance workers at these mines. The second column shows the average of all labor costs per ton at each of the mines. It combines the wage and benefits cost shown in the first column, costs for administration and supervision, and adjustments for differences in labor productivities at the mines.

You can see that Colombian labor costs are significantly less than United States labor costs in each case, even though productivity in the United States is much higher. The largest proportional

difference is between the West Virginia surface mine and the small Colombian surface mine, where the proportion is about three. The largest dollar difference is between the underground mines where the difference is about $10 per ton.

To sum up, we believe that the results indicate that the size of specific elements of production costs at coal mines can be reliably determined with the engineering/economics approach that we have used. When specific mines are carefully matched, valid comparisons of regulatory and labor costs in the two countries can be drawn.

We are now in the process of developing a cost comparison for specific United States and Canadian coal mines and hope to be able to include transportation costs to make a fuller assessment of factors affecting the competitiveness of representative mines in these two countries.

This concludes my statement, Mr. Chairman.

[The prepared statement of Dr. Enzer follows:]

Testimony of Dr. Hermann Enzer
Assistant Director--Mineral Data Analysis
Bureau of Mines, Department of the Interior
Before Senate Committee on Energy and Natural Resources
Subcommittee on Natural Resources Development and Production

May 1, 1986

On behalf of the Bureau of Mines, thank you for the opportunity to testify before this subcommittee on our study. My testimony is based on the results of a joint Commerce Department--Bureau of Mines study and my remarks have been coordinated with those just given by Mr. Kelley. The objective of the study was to analyze the differences in cost structure at U.S. and Colombian coal mines. Our part involved helping to select comparable mines, estimating their total mine-mouth cost of producing coal and spliting that total into capital, labor, regulatory and tax components. I want to describe how we accomplished each of these three tasks.

Selecting Comparable Mines

Coal production costs vary for many reasons not connected with whether the mines are located in this country or Colombia. For instance, the depth of the coal bed below the surface, its angle of dip, its thickness, whether one thick seam or several thin seams will be mined, and the scale of the operation all alter the total as well as the structure of mining costs.

Typically, it costs more to mine coal with underground methods than with surface methods. Thus coal from underground mines must have advantages, such as higher Btu content and/or closer proximity to market, to compete with surface mined coal. As an example, a 15 million ton per year surface operation in the Powder River Basin was estimated to be mining coal for about $7.50/ton while a 1 million ton per year underground mine in West Virginia was found to be mining coal for about $35/ton.

Even different surface coal operations can experience large cost differences. A 3.5 million ton per year operation in the western U.S. mining one continuous thick seam was estimated to incur costs of about $8/ton while another operation in the same general area and of similar size was mining several thin seams for about $21/ton.

Because production cost differences of this magnitude exist even in the same country, meaningful comparisons of coal costs in different countries must be developed in one of two ways. One approach is to combine quality factors and delivery costs to a common market with mining costs from each mine in a competitiveness comparison. A second approach is to match similar types of mines in the two countries and concentrate on measuring the total and the structure of the costs of extracting coal in the two countries.

Internal transportation costs can significantly affect the competitiveness of coal from specific deposits. The required transportation data for this study, both within the U.S. and within Colombia, was simply not available. We chose the second approach. With careful selection of mines, this approach allows meaningful comparison of country differences in labor, health, safety, management, financial, and environmental costs which account for most of the fundamental differences between countries. This approach avoids the risk of distortions that can result from introducing assumptions about delivery costs.

Our study compared production cost differences for three cases.

(1) The El Cerrejon operation, a multi-seam, moderately dipping, coal strip mine in Colombia was compared with a simulated operation in Wyoming assumed to have the same deposit and design characteristics. That is, the geologic setting and subsequent mine plan for Cerrejon North was "relocated" to an area in the U.S. with roughly similar coal deposits.

(2) An existing multi-seam, mountain-top-removal coal mine in West Virginia was compared with an actual surface-mining operation in Colombia, both having similar mine plans and geological settings.

(3) An existing single-seam, underground coal mine in West Virginia was compared with an actual deep-mining operation in Colombia having a similar mine plan and geological setting.

Cost Estimation

For all the domestic mine evaluations, Bureau of Mines personnel visited the operation to gather the engineering cost data. A consultant was contracted to visit and gather data for Colombian operations (other than the Cerrejon North project for which Intercor and Morrison-Knudson provided data). Investment, operating, and fiscal data were consolidated and analyzed using standard feasibility type analysis methods. A detailed explanation of the methodology used is found in an Appendix to the report. I will confine myself to a summary of how we measured the health, safety, and environmental cost items and the labor costs at each mine and what we found about these items. The benefits derived from health and safety regulations and environmental requirements were not considered in this analysis.

Regulatory Costs

The Colombian mining industry has published a 39 page document setting forth health and safety regulation for the extraction of underground coal. Many of the regulations described within the Colombian document are as strict as U.S. mining regulations. However, reliable information substantiates the assumption that the Colombian underground coal mining industry is for all intents and purposes, unregulated. No agency could be found with responsibility to enforce underground mining regulations. Health and safety programs, where they do exist, are voluntary programs established and enforced by individual mines or companies. Therefore, it was assumed in the comparative analyses that no mine safety and health and environmental regulations affect operations at the Colombian mine. The Colombian surface coal mining industry has no regulations by which it must abide.

Mine safety, health and environmental costs are incurred in U.S. coal mines in response to detailed statutory regulations. The El Cerrejon North project, a joint venture of Intercor and the Colombian government entity Carbocol, voluntarily operates under health, safety, and environmental standards comparable to those existing in the U.S. Generally, mine safety and health and environmental costs were found to be nonexistent or uninforced for other Colombian surface and underground coal mines. The methodology used to determine safety, health and environmental costs varied according to the two basic methods of mining, surface and underground.

For surface mining, environmental costs, consisting primarily of reclamation costs, are more significant. At the two U.S. surface mines these costs were estimated to be $0.24 and $1 per ton while in Colombia they were estimated to be $0.62/ton at Cerrejon and zero at the smaller surface mine. Mine safety and health costs at surface mines largely consist of miner training and dust control. At the two U.S. surface mines these costs were estimated to be $0.09 and $0.20 per ton while in Colombia they were estimated to be $0.25/ton at Cerrejon and zero at the smaller surface mine.

For underground mines, health and safety costs are much more significant than environmental costs. These costs are attributed to paid training time, productivity decreases, equipment modifications and personal equipment and safety facilities. At the West Virginia underground mine, these costs were estimated to equal $3.59 per ton, largely due to productivity losses. Environmental requirements associated with underground mining consisted of capital and operating costs for water and sewage treatment and reclamation, incurred primarily as a result of reclaiming preparation plant tailings. In West Virginia, these costs were found to equal $0.30 per ton.

In addition to the aforementioned costs for mine health and safety and environmental concerns, U.S. mines also incur costs as a result of reclamation and Black Lung taxes. Reclamation taxes are $0.35 per ton of coal and $0.15 per ton for surface and underground mines, respectively. The tax is used for abandoned mine reclamation. Black Lung taxes are $0.50 per ton and $1.00 per ton for surface and underground mines, respectively. This tax is paid to a fund for black lung disease victims. No comparable taxes were found to exist in Colombia.

In summary, regulatory costs in the U.S. were estimated to be $1.94 per ton (4% of total costs at the mine-mouth) at the large surface mine, $1.29 per ton (4% of total costs) at the small surface mine, and $5.04 per ton (14% total costs) at the underground mine. An alternative computation of the cost of complying with mine safety and health requirements and with environmental requirements is also derived by hypothetically imposing U.S. regulations on the existing Colombian mines. Imposing the Black Lung and Reclamation tax would add $0.93 per ton (2%) to average total cost at El Cerrejon. Imposing all U.S. regulations would add $2.41 per ton (9%) to the average total cost at the Colombian small surface mine and $7.87 per ton (47%) to the average total cost at the Colombian underground mine.

Labor Costs

Except at the simulated coal mine in Wyoming, wage and productivity data were provided by the mine operators. Similar data for the simulated mine were extrapolated from actual wage and employment figures at an existing Wyoming coal mine. Labor costs per ton of coal were derived by combining data on wage and fringe benefit rates for separate occupational categories with physical operating characteristics at each mine.

Lower wage and fringe benefit rates at El Cerrejon ($5.90 per hour versus $21.47 per hour in Wyoming) more than offset the lower productivity (2.65 tons per manhour versus 4.74 tons per manhour relative to its Wyoming equivalent). This combination was found to give the large Colombian surface mine a $1.72 per ton labor cost advantage over its Wyoming equivalent.

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This advantage for Colombia is even greater at the other two sets of mines analyzed. The labor costs per ton reported for the small Colombian coal mines were determined to be $2.95 per hour compared to an average of $18.50 per hour in West Virginia. Lower productivity at the surface mine (1.61 tons per manhour in Colombia versus 3.52 tons per manhour in West Virginia) and at the underground mine (0.37 tons per manhour in Colombia versus 1.33 tons per manhour in West Virginia) was found to offset only part of this wage difference. The Colombian surface operation has a $6.30 per ton labor cost advantage over its West Virginia equivalent, while the Colombian underground operation has a $9.14 per ton labor cost advantage over its West Virginia equivalent.

Total Costs

Using captial and operating cost elements plus tax and royalty obligations, total costs for each operation were determined using a discounted cash flow rate of return method. This technique is a standard investment decision tool used by industry for comparing costs and values of different projects.

At the El Cerrejon coal mine, average total costs were found to be $5.35 per ton fob mine less than at its U.S. equivalent. Its labor cost advantage is equal to 32% of this difference and it regulatory cost advantage is equal to 17% of this difference. Differences in capital, royalty, and tax costs account for the rest of the difference.

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Average total costs fob mine at the small Colombian surface mine were found to be $5.44 per tons less than at its West Virginia equivalent. Its labor cost advantage is larger than this difference, meaning that higher tax and capital costs offset some of the labor cost advantage. Its regulatory cost advantage is equal to 44% of the difference in total costs.

Average total costs fob mine at the Colombian underground mine were found to be $18.19 per ton less than at its West Virginia equivalent. Its labor cost advantage is equal to half of this difference and its regulatory cost advantage is equal to 43% of the difference in total costs.

While we apologize for burdening you with this litany of numerical comparisons, we believe that this level of detail is required to isolate the relative significance of those factors we were asked to measure. This effort has convinced us of the importance of carefully selecting the mines to be compared. A second study of this type comparing Canadian and U.S. coal mining costs is underway now. In that study we hope to supplement comparisons of mine-mouth costs with site-specific transportation data which will permit a fuller assessment of the competitiveness of coal from both areas.

EXHIBIT I.

COAL MINE COST COMPARISON SUMMARY
100 PERCENT EQUITY FINANCING
(In 1984 Dollars Per Short Ton and at a 15 percent DCFROR)

	Large Surface Mines		Small Surface Mine		Underground Mines		Western U.S. Mines		
	-1-	-2-	-3-	-4-	-5-	-6-	-7-	-8-	-9-
Cost Components	Wyoming Simulation	El Cerrejon Project	West Virginia	San Jorge	West Virginia	Antioquia	Multi Seam 3.4 Mt/Yr	Single Seam 3.5 Mt/Yr	Single Seam 15 Mt/Yr
Production									
Capital Costs	$20.17	$21.21	$6.41	$9.72	$4.20	$2.66	$3.48	$1.20	$0.97
Operating Costs	$10.94	$12.20	$20.73	$13.44	$26.43	$12.47	$11.00	$3.94	$3.32
Subtotal	$31.11	$33.31	$27.14	$23.16	$30.63	$15.13	$14.48	$5.14	$4.29
Imposed									
Land	$6.85	$3.93	$3.72	$1.42	$1.12	$0.84	$1.86	$0.21	$0.93
Taxes	$16.53	$11.90	$2.93	$3.77	$3.24	$0.83	$4.52	$2.68	$2.20
Subtotal	$23.38	$15.83	$6.65	$5.19	$4.36	$1.67	$6.38	$2.89	$3.13
Total Costs	$54.49	$49.14	$33.79	$28.35	$34.99	$16.80	$20.86	$8.03	$7.42

EXHIBIT II.

Regulatory cost comparison for surface mines
(1984 dollars/st)

Regulatory Category	Simulated Wyoming	Cerrejon North	West Virginia	Colombia[a]
Mine safety & health	$0.59	$0.25	$0.70	$0.61
Training	0.02	0.07[b]	0.02	0.02
Dust control	0.07	0.18	0.18	0.09
Black lung tax	0.50	0	0.50	0.50
Environment	1.35	0.87	$0.59	$1.17
Reclamation	1.00	0.62	0.24[c]	0.82
Reclamation tax	0.35	0	0.35	0.35
Surface Mine Regulatory Cost Totals	$1.94	$0.87	$1.29	$1.78

Regulatory cost comparison for underground mines

Regulatory Category	West Virginia	Colombia[a]
Mine safety & health	$4.59	$6.77
Training	0.06	0.00
Productivity changes	3.31	2.82
Equipment modifications	0.18	2.95
Personal equipment and safety facilities	0.04	d
Black lung tax	1.00	1.00
Environment	$0.45	$0.15
Water treatment	0.01	0.00
Reclamation	0.29	0.00
Reclamation tax	0.15	0.15
Underground Mine Regulatory Cost Total	$5.04	$6.92

[a]The costs shown for Colombia were those due to U.S.-imposed regulations. Actual costs for Colombia were zero.

[b]Not strictly comparable to simulated Wyoming cost. Estimate does not include a separate safety cost but does include complete initial training.

[c]Reclamation is contracted out and assumed here to be a labor cost.

[d] Included in equipment modifications.

EXHIBIT III.

Labor cost comparisons for surface and underground mines
(1984 dollars/st)

Mine	Average Wages & Fringe Benefits for Production Employees ($/hr)	Labor Costs Adjusted for Productivity Differences ($/ton)
Simulated Wyoming Surface Mine	$21.47	$4.79
El Cerrejon North	$5.90	$3.07
West Virginia Surface Mine	$18.89	$9.66
San Jorge Surface Mine	$2.95	$3.36
West Virginia Underground Mine	$18.17	$17.04
Antioquia Underground Mine	$2.95[a]	$7.90

[a]Average wage for all employees, both production and administrative.

Mr. KELLEY. Just to follow up on the Canadian study that is under way, and this is an ongoing program, once we complete that we will be going to Australia next, then South Africa, then Poland. That will complete pretty much the major competitors.

Senator WARNER. Chairman McClure and Senator Johnston are planning hearings on the question of the Canadian industry.

Gentlemen, let us take a look at the following issues here. In your statements on the Commerce study of United States and Colombian mines, you state that no evidence has been found to indicate that the Colombian or State governments are providing direct subsidies. Are there any indirect subsidies being provided to the mines by the Colombian Government that would afford them price advantages for their coal in the world market? I will allow the panel to discuss that among themselves.

Mr. KELLEY. Let me state, first of all, as far as finding any direct subsidies, as far as the study goes, we were not able to. When you have a CVD case or a dumping case, obviously the U.S. Government has more strength in gathering facts from the foreign governments that we have to deal with. This obviously was not a CVD case or a dumping case under the trade laws. It was a study, and it required voluntary cooperation from the Colombian Government and from the companies in Colombia, and I might say also from the United States companies that were studied in this area.

Maybe Dr. Yancik would like to touch on that a little bit more.

Dr. YANCIK. Well, I think that fairly well covers it. The information was voluntarily submitted to us by the Colombian Government, by the mining companies involved, and we also, the Bureau of Mines, had a contractor that had visited Colombia and visited the mines and collected information, and based on that we saw no evidence of any subsidies, either direct or indirect, that were being provided to El Cerrejon or the other mining operations.

Senator WARNER. Does that conclude your response?

Mr. KELLEY. Yes.

Senator WARNER. You state that based on the study of mine-mouth costs they were anywhere from 50 to 70 percent delivered costs. Do mining costs methodology determine what specific factors contribute the largest percentage of the 50 to 70 percent differential?

Dr. YANCIK. Mr. Chairman, the statement that was made in our testimony about the mine costs average from 50 to 70 percent are the delivered price. The remaining costs would be the costs of transportation and any other freight and handling costs.

Now within the basic production costs, the mine-mouth costs, the basic major difference in cost is between the large surface mines in the United States and in Colombia which we found resulted from the tax costs, which are collected tax costs, and labor costs.

Senator WARNER. What percentage of the 50 to 70 percent mine-mouth costs are because coal companies are being forced to comply with regulatory burdens?

Dr. YANCIK. Mr. Chairman, I do not have the actual percentage figures. I would have to calculate them to be correct. The numbers are in—all of the numbers are in the report. It would just be a matter of making that calculation.

Senator WARNER. Very well, please submit that for the record.

[The information follows:]

The costs of regulatory burdens imposed on the mines used in the study, excluding costs for land, vary depending on the state in which the mine is located. Also, some of the cost of health, safety and environmental regulations are now simply considered good mining practice by the industry, and these costs are internalized in the operating costs. Therefore, the cost estimates in the Colombian study are conservative.

The percentage of total mine-mouth costs for the full federal and state regulatory burden are shown in Column A in the following table. Column A reflects the discernible costs of health and safety regulations, black lung taxes, reclamation taxes, federal and state income taxes, property and ad valorem taxes, and severance taxes. Column B reflects only health, safety and environmental costs. For both columns the cost percentages are given for a 15 percent rate of return, and at breakeven cost (0 percent rate of return).

PERCENT OF MINE-MOUTH COST

	A	B
1. Wyoming simulated surface mine:		
Breakeven	24.7	7.5
Full allocation	32.3	3.5
2. West Virginia surface mine:		
Breakeven	9.0	4.3
Full allocation	10.0	3.8
3. West Virginia underground mine:		
Breakeven	23.2	15.7
Full allocation	23.2	14.4

Senator WARNER. Would you also advise us with respect to the measure of regulatory burden experienced by the mine in Colombia?

Dr. YANCIK. We will submit that for the record.

[The information follows:]

El Cerrejon mine, assuming a debt to equity structure of 54/46, has a full regulatory cost burden (other than land costs) at breakeven of 9.7 percent of total mine-mouth costs. At 15 percent rate of return on equity capital invested, the full regulatory cost burden is 21.4 percent. Considering only health, safety and environmental regulatory costs the percentage of total mine-mouth cost at breakeven is 3.5 percent and at 15 percent return the percentage is 2.0 percent of mine-mouth cost.

Dr. ENZER. Mr. Chairman, I can follow that up. The El Cerrejon mine——

Senator WARNER. That is the one.

Dr. ENZER. That is the one—has regulatory costs of only about 2 percent of total cost.

Senator WARNER. Two percent?

Dr. ENZER. Two percent.

Senator WARNER. What are the reclamation standards at the mine?

Dr. ENZER. As I mentioned to you, Exxon and Carbocol have stated that they will follow the same standards as are followed in the United States at large U.S. surface mines.

Senator WARNER. Then they do compare with the United States?

Dr. ENZER. With the United States, yes.

Senator WARNER. Thank you very much.

Senator Rockefeller.

Senator ROCKEFELLER. Mr. Chairman, I have a few questions, but first I would ask your permission that a statement by Senator Johnston be put in the record.

Senator WARNER. Without objection.

[The prepared statement of Senator Johnston follows:]

STATEMENT OF HON. J. BENNETT JOHNSTON, A U.S. SENATOR FROM THE STATE OF LOUISIANA

The issue of the impacts of coal and electricity imports on the domestic coal industry is one which is worthy of the Subcommittee's attention. We are all too well aware of the havoc the international market can wreak on our domestic energy supplies and the producers of those supplies. Certainly the oil producers in my State of Louisiana do not need to be reminded of the impact of the international market at home.

I am pleased that the Departments of Energy, Commerce and Interior have been looking into the issue of coal imports. A related area in which I have had longstanding concern is that of the impacts of coal transportation on our competitive position in the world market. I believe that further analysis of this matter should be undertaken. The issue of coal imports is one which I hope the Subcommittee will continue to monitor closely.

Senator ROCKEFELLER. Dr. Enzer, or anybody who wants to answer, but I am looking at your testimony here. You talk about two different approaches for analysis as between Colombia and American coal. You say one analysis is to combine quality factors and delivery costs to a common market with mining costs from each mine in a competitive comparison. In other words, that would be what I would call really measuring head-to-head competition, the realities of who is buying and who is selling——

Dr. ENZER. Yes, Senator.

Senator ROCKEFELLER [continuing]. Who is offering what, and who is buying what.

Dr. ENZER. Yes.

Senator ROCKEFELLER. Then you have the second approach and that is what you have done, which is to match similar types of mines in two countries and concentrate on measuring the total infrastructure, et cetera. I do not understand that.

You said that you chose the second approach. It seems to me that the first approach is the one that really would give us the information that we want. In other words, the realities of head-to-head competition.

For example, is it not the final cost comparison on the overall delivered cost which would take into effect British thermal unit value, quality of the coal, transportation costs—I mean, is that not the reality of the competition that we are facing?

Dr. ENZER. That is the reality, Senator.

Senator ROCKEFELLER. I mean, we are not talking about a theoretical West Virginia surface mine versus a theoretical underground mine in Colombia. We are talking about surface mines in Colombia going head to head with underground mines in West Virginia. That is the reality.

Dr. ENZER. That is the reality.

Senator ROCKEFELLER. But you do not discuss that. I do not understand that.

Dr. ENZER. I cannot disagree with you, Senator, that that is the reality. We did start out that way—namely, with the approach that you say is the right one. We had great difficulty getting informa-

tion on transportation costs, both within the mines as well as from the mine to the harbor.

We intended to adjust for quality, British thermal unit, sulfur content, and we started out to work at a delivered cost. But because of the difficulties both in getting information and in meaningfully comparing labor and regulatory costs at different types of mines, we felt that to keep to the deadline we would adopt the second approach, and perhaps follow this up when we got the additional information that is needed to do what you just described.

Senator ROCKEFELLER. Well, I understand that, but in a sense your deadline you were talking about was, what, this hearing?

Dr. ENZER. No, that was last year.

Senator ROCKEFELLER. Well, what was that deadline? Imposed by whom?

Mr. KELLEY. That was imposed actually by a question we received from Senator McClure who asked us when we would have it ready.

Senator ROCKEFELLER. Well, I respect that, but it seems to me, Mr. Chairman, that this is—I understand when in this country the East competes against the West, and that is one thing, but if we are getting into a situation where we are competing with Colombia, it seems to me that we ought to have before us information which is valid, which is real.

Now if the deadline was a problem, that does not satisfy my need for knowledge about the comparative costs within the real world of the competition. Are you going to get that to us, and by when?

Mr. KELLEY. I think Dr. Yancik will comment.

Dr. YANCIK. Senator, you raised very important questions, questions that we wrestled with, as Dr. Enzer said. In order to make a meaningful comparison, you have to look at very specific mines that are competing in very specific markets, because the transportation and other cost considerations can vary substantially.

What we do not have at that time, nor do we have at the present time, is the specific costs associated with the transportation. Many of these costs are under contract, and the actual costs are on a confidential basis. Further, it would have required this study to undertake such a substantial number of mines that you would have to study and look at for markets that the study would be so voluminous that I question whether it could be done in any reasonable period of time.

So faced with that, we responded to answer the very specific questions we were directed to do by the House appropriations resolution. That is, to determine the basic structural cost differences between the two mining operations, Colombia and the United States.

This study, as Dr. Enzer said, could be used as a basis then for expansion, including transportation costs, and narrowing it down to looking at the very specific markets, and perhaps to be on a meaningful basis looking at it from a specific utility basis, having an option to buy coal from Colombia versus coal from West Virginia or Kentucky. In fact I think that is exactly the kind of study that was done by the utility in Florida that ultimately made their decision on where they were going to purchase coal.

Senator FORD. Would the Senator yield for a question?

Dr. Enzer, you said you started out on the first phase, which was the reality, and you had to shift to the second area because you could not get the information.

Dr. ENZER. Yes, sir.

Senator FORD. Now where did you try to get the information, and who would not make it available to you?

Dr. ENZER. Well, we had long discussions with Mr. Yancik on where we could get costs—transportation costs, ocean freight rates, rates for railroads. He looked into this and came back to us telling us that it is just very difficult to get that information, as he just said.

Senator FORD. So it was not any specific group or anything, just the overall. Where did you look?

Dr. YANCIK. Senator, what we did was we contacted a number of the coal associations and asked for mining costs——

Senator FORD. In Colombia?

Dr. YANCIK. No; here in the United States. The cost numbers for Colombia were, since we had only a very few number of mines to deal with, that information, although it was difficult to get, was available to us. As mentioned by Dr. Enzer, both Intercor and Carbocol cooperated with us in supplying us the numbers.

The difficulty was here in the United States. We have such diverse production entities here. We have varying producing regions under which the mining conditions and the number of mines, the type of mines vary considerably. So that there is not a uniformity. There isn't a typical or an average mine in the United States.

Furthermore this required, in order to have credibility, we needed to get very specific numbers from specific operations so that we were comparing apples against apples. We have approached a number of companies, and we were able to get as shown in this report a West Virginia surface and underground mine to cooperate to supply us the numbers. We also were turned down by a number of other companies that would have been included in this study had they been in a position to supply us with the kind of information we needed.

Now with respect to the transportation cost, contracts with the railroads at the actual contract price is a confidential number, and that number is not available to any government agency or anyone else.

Senator FORD. Did Exxon certify the figures that you were using in here?

Dr. YANCIK. After they supplied us with the basic operating information and other basic costs, the analysis was completed and the analysis was provided to them so that they could look to see whether or not it was representative.

Senator FORD. And they signed off on it?

Dr. YANCIK. Exxon came back and said that they thought the numbers as presented here were representative, yes.

Senator FORD. Did you try, in getting your information, did you try the ICC?

Dr. YANCIK. Yes, we did, sir.

Senator FORD. You tried the ICC. You tried—Did you say you tried all the coal associations?

Dr. YANCIK. Yes, sir, we did. We also worked very closely with the Energy Information Administration, and to utilize all of the information and data that was available from that organization.

Mr. KELLEY. Frankly, Senator, one of the reasons the study was delayed was not so much on the Colombian side but was the ability to get some of the United States companies to cooperate in this area.

Senator FORD. So the U.S. companies would not cooperate?

Mr. KELLEY. That was the delay problem.

Senator WARNER. Senator Rockefeller, I understand you have a further inquiry, and then we will proceed to the next panel.

Senator ROCKEFELLER. We will have a followup on this study going to the second phase with respect to the real head-to-head competition costs between Colombian coal and Appalachian coal?

Mr. KELLEY. Number one, it depends on the availability of the information in the United States. The next study we have got going which deals with transportation is with Canada. I might say something, Senator.

One of the other reasons for the delay is we started this last year and a little thing called Gramm-Rudman hit us about January, and as part of a joint effort with Interior we have to allocate our resources, and it is expensive when they are traveling.

So we are going to try to do that, yes, sir. In answer to your question, we feel that the Colombian area is a very serious question.

Senator ROCKEFELLER. And you do regard the Colombian problem as a potential threat to not only—not only their imports into this country, but our exports for example to Western Europe? You do regard the Colombia situation as a threat to both their imports and our exports?

Mr. KELLEY. I regard the Colombia marketing situation as something that can cause possible disruption in the international coal trade area.

Senator WARNER. Thank you——

Senator ROCKEFELLER. Can I ask one question to Mr. Yancik? We talked before I went to Japan and Korea, Mr. Yancik, and you were very helpful to me. When I met with the Deputy Minister of International Trade and Industry for Energy, Mr. Nonochi, I put the question to him, are the Japanese looking at that El Cerrejon mine in Colombia. I had heard that they had sent an expedition to look at it. I had heard that they were considering making an investment of perhaps a canal or some kind of a transportation link directly over to the ocean on their side so they could move it out of Colombia directly across the Pacific.

Now he said that was not the case. I told them that what with all the Japanese are doing in their diversifying—that is, into Australia, and Canada, and countries like China, Russia, et cetera—that if they took their coal interests, investment interests into Colombia to that mine or that series of mines, I would regard that as a hostile act on the part of the Japanese and extremely unwise politically, not only with this Senator but with many others.

They demurred on the answer. Minister Nonochi did not give me a clear answer: What is your understanding of what the Japanese are doing with respect to their interests in that Colombia El Cerrejon mine?

Dr. YANCIK. Senator, the information that we have is that the Japanese have sent several delegations from both the utility and the steel industry to El Cerrejon to look at the operation. We also know that they have arranged to buy test shipments from El Cerrejon that will be sent to Japan sometime this year. The total of those shipments, we're not certain, but we have heard that they could go as high as 1 million tons.

Senator ROCKEFELLER. Twenty-one?

Dr. YANCIK. One million.

Senator ROCKEFELLER. One million?

Dr. YANCIK. One million tons. So I think with respect to potential Japanese investment in the infrastructure or other mining operations within El Cerrejon, we have no information or evidence to collaborate whether they are thinking of doing that, or planning, or any other discussions in that area. But I think it is clear that the Japanese are interested in El Cerrejon and, as evidenced by the test shipments, it is clear also that they are looking to diversify their supplies further.

Mr. KELLEY. Senator, I can assure you that in 2½ weeks there is a United States official delegation going both to Korea and Japan to deal with the coal issues, and we will bring this up with them.

Senator ROCKEFELLER. Thank you, Mr. Chairman.

Senator WARNER. As I understand it, Senator Ford, you have a follow-up?

Senator FORD. I have a follow-up question.

Mr. Kelley, I want to ask you some straightforward questions, and I am not sure that you can answer all of them, but if you cannot I would like to have them in writing.

Is there any indication that Exxon will divert their position to the Japanese? Because their contract was only for 27 years, and that runs out about the year 2008 or 2009. I notice that the production has gone from about 2 million a year now to about 21 million tons per year. So the acceleration is there.

Is there any indication to you that the ownership or percentage of El Cerrejon of others is going to be transferred to the Japanese?

Mr. KELLEY. We have seen no public or private cables that indicate that at this point, but we will be glad to check that out.

[The information follows:]

Following the hearing, State and Commerce asked the Japanese Ministry of Trade and Industry to contact Japanese coal users and trading companies and inquire if they plan to acquire ownership or invest in the expansion of El Cerrejon. MITI officials informed Commerce officials in a meeting in Tokyo on May 21, 1985 that they contacted all the major coal using industries and trading companies and that none of them had any current plans to invest in El Cerrejon.

However, MITI did inform us unofficially that New Energy Development Organization (NEDO), an agency established by MITI and partially funded by the private sector, is considering investing in a joint project with Carbocol to explore the feasibility of developing coal reserves in Colombia for export to Japan and other steam coal markets. Apparently this initiative was made by NEDO and not the Colombian government's state coal company Carbocol.

Senator FORD. Did you take into consideration—well, let me ask you this question. How much money did the Exim Bank, the United States and so forth, allow the country of Colombia to have for construction of the El Cerrejon Exxon project for its mine-mouth, its railroad, and the deep port?

Dr. YANCIK. The preliminary commitment, as I understand it, was $750 million, of which they have taken about $400 million at this point.

Senator FORD. You committed how much?

Mr. KELLEY. The EXIM Bank committed $750 million.

Senator FORD. And this country has not given anything as far as foreign aid or anything to the country of Colombia that could have been diverted into this area?

Mr. KELLEY. Not that I know of, but we will be glad——

Senator FORD. What is the interest rate from the Exim Bank to Colombia, or Exxon?

Mr. KELLEY. We would have to check. Are you talking about when the loan commitment was made?

Senator FORD. Yes. What is the interest that they are paying on any kind of loan to the Exim Bank?

Mr. KELLEY. I would have to check on that, Senator, but I am sure that is relatively easy to get.

[The information follows:]

The Export Import Bank made a preliminary commitment in November 1981 to loan $850 million to the Colombian coal firm Carbocol for the purchase of U.S. services and mining equipment for El Cerrejon. On August 12, 1982 the Bank authorized $500 million, and on September 12, 1982, $150 million; both amounts were loaned at 12 percent and payable in 30 semiannual installments beginning July 10, 1987. On March 7, 1985, $200 million was loaned at 11.2 percent; it is payable in 20 semiannual installments beginning July 10, 1990. The Bank charged 3.125 percent in fees, and expects to more than cover its costs. In a default, the loans would be paid by the Republic of Colombia.

Senator FORD. Do you understand there might be any other American companies that would be going into a similar business that would be using the coal for export to this country?

Mr. KELLEY. I do not think I understood your question.

Senator FORD. Do you know of any other American companies that are involved in similar operations in Colombia in other countries that would be in the posture of producing coal for import?

Mr. KELLEY. Coal to export to this country?

Senator FORD. Yes.

Mr. KELLEY. The only——

Senator FORD. Or export.

Mr. KELLEY. The only one that I was aware of was a major coal construction project, and I think that has been put on hold, was Occidental's proposal in China. But that would have been more of indirect than direct to the United States. They would have been penetrating into Korea and Japanese markets, which would have obviously hurt our domestic markets.

Senator FORD. The markets that we might have an opportunity to export to.

Mr. KELLEY. I think that is on hold right now.

Senator FORD. Well, there are a lot of folks from Lexington and around that area who have been shipped to China and I hope you would look into that.

Mr. Chairman, I would ask Mr. Kelley if he would give us a written detail of what procedures you went through to try to get the detailed reality information. Who turned you down? That sort of thing. And I would like to have a full explanation of the Exim Bank interest charged, and so forth, as it relates to this operation.

Mr. KELLEY. We can do that for the record, or we can come up and sit down and talk with you.

Senator FORD. No, I want it for the record, Mr. Kelley.

Dr. ENZER. The rate, Senator, we have here in the report was 12 percent.

Senator FORD. It was? Or what is it now?

Dr. ENZER. It is. It is 12 percent.

[The information follows:]

In planning the scope of the study of Colombian coal mines an initial survey of mining operations showed that El Cerrejon was by far the most significant coal mine in the country. The survey also showed that the remainder of coal production came from small surface and underground mines, some of which were only partially mechanized. Even though these small mines are not likely to export coal a decision was made to include them in this study to have a complete representation of the Colombian coal industry. Therefore, three Colombian mines were selected for study, El Cerrejon, a small surface mine in the San Jorge region, and a small underground mine in the Antioquia region.

Upon selection of the Colombian mines the next step was the selection of U.S. mines for comparison purposes. As explained in the report, a simulated mine located in Wyoming was necessary to construct for a realistic comparison since no comparable mines to El Cerrejon exist in the U.S. Although no truly comparable mines existed in the U.S. matching the small surface and underground mines in Colombia, a decision was made to locate mines in either West Virginia or Kentucky which had similar geology even though the mines would be using different mining methods.

The process of locating comparable geologic conditions in West Virginia and Kentucky narrowed the search for mines to only certain locations in both these states. The companies operating mines in these selected locations were identified. The purpose and need for securing the cooperation of mining companies was explained to coal associations and their assistance was sought to urge companies to participate in the study. Through these contacts several companies were approached by the Department of Commerce/Bureau of Mines and when a company with mines in West Virginia having the desired geologic mining conditions agreed to participate in the study, no additional mines were necessary to perform the study. Subsequent contact was made with several companies in Kentucky, but none of these companies decided to volunteer their participation.

Commerce and the Bureau of Mines obtained data and information on the Colombian and U.S. mines from a wide variety of government and industry sources. Information was supplied by El Cerrejon, Exxon, and the government of Colombia, plus numerous sources of technical data on the El Cerrejon project, including the Export Import Bank. A private contractor for the Bureau of Mines, BXG, Inc. surveyed selected mines in Colombia and obtained additional information from the Colombian Ministry of Mines and Energy. A joint Commerce/Bureau of Mines team visited mining operations in the West and East to collect on site data from the cooperating mining companies. Every effort was made to obtain independent verification of information acquired from any one source. Overall, Commerce and the Bureau of Mines received excellent cooperation from all the sources mentioned above, although there were frequent and sometimes lengthy delays in receiving the necessary information. Most of these delays occurred in the process of having data and information cleared at the many levels required by both government and industry contributors.

Information for the record on Exim Bank involvement in Occidental's joint venture with the Chinese in the Pinshou coal mine project.

Exim Bank's financing offer to Occidental for the Pinshou coal mine project was approved on July 24, 1984, and was extended until July 15, 1986. It can be renewed by the Exim Bank board of directors. Exim Bank's offer is to finance up to 75 percent of the value of the U.S. equipment and services furnished Pinshou with a direct loan at an interest rate of 8.8 percent or, alternatively, up to 85 percent of the U.S. export value with a financial guarantee to private lenders. The repayment term is 10 years beginning June 30, 1988, or six months after project completion, whichever is earlier.

Occidental and their Chinese partners are still negotiating with lenders and the Chinese government entities to conclude financing arrangements for this project. At this time, it is not known when the negotiations will be concluded. It is also not known how much, if any, of the offered Exim Bank financing will be utilized for this project.

Senator WARNER. Thank you very much, gentlemen. We shall now proceed with testimony from Lawrence A. Pettis, Acting Deputy Administrator, Energy Information Administration. He will be accompanied by Mr. Charles Heath and Mr. Robert Schnapp.

I bring to the attention of the members of the committee that we have permission to sit only until 12 o'clock.

Senator FORD. Oh, I am sorry.

Senator WARNER. That is all right.

Thank you, Mr. Pettis. We are going to receive your statement for the record, and ask if you would give us a brief summary of your testimony.

STATEMENT OF LAWRENCE A. PETTIS, DEPUTY ADMINISTRATOR, ENERGY INFORMATION ADMINISTRATION, DEPARTMENT OF ENERGY, ACCOMPANIED BY CHARLES HEATH, DIRECTOR OF COAL DIVISION; AND ROBERT M. SCHNAPP, CHIEF OF DATA ANALYSIS AND FORECASTING BRANCH

Mr. PETTIS. Mr. Chairman, and members of the subcommittee——

Senator WARNER. I do urge you to bring that microphone as close as possible.

Mr. PETTIS. My name is Lawrence Pettis, and I am the Deputy Administrator of the Energy Information Administration. With me today are Charles Heath, Director of EIA's Coal Division, on my left; and Robert Schnapp, Chief of the Coal Division's Data Analysis and Forecasting Branch, on my right.

We are pleased to appear before you today to present the results of an analysis by EIA on the forecast for coal imports into the United States and the effect of those imports on the U.S. coal industry. EIA conducted this analysis in response to a congressional request as specified in the Energy Policy and Conservation Amendments Act of 1985. This analysis appears in the recently released EIA report "Outlook for U.S. Coal Imports."

The principal result of EIA's analysis addressed the following concerns: What amount of imported coal is likely to come into the various domestic markets in 1995, and from what countries? What effect could those imports have on domestic coal production, coal-related jobs and income, and overall jobs and income in the U.S. economy and affected States.

I would like to briefly summarize the results and request that my full statement be included in the record.

Our analysis indicates that a total of 4.8 million tons of foreign coal could come into the United States in 1995, compared with 2 million tons in 1985. These projected imports include 1.8 million tons of Canadian coal into California and the Washington-Oregon area for industrial use, displacing coal mostly from Utah and Wyoming; 2.5 million tons of Colombian coal into Florida for electric utility use displacing Kentucky coal; 300,000 tons of Colombian coal into Puerto Rico for industrial use displacing West Virginia coal; and about 60,000 tons of Australian coal into Hawaii for industrial use displacing Utah coal.

These assessments are the results of comparing foreign and domestic coal supplies in terms of their projected delivered costs per million Btu in 1995. The forecast assumes that domestic coal supplied under existing contracts that are in force beyond 1995 is not subject to competition from foreign coal.

The projected imports of Canadian coal to the west coast States reflect a high thermal content per ton of Canadian coal compared with that of our western coal and the low cost of transporting Canadian coal to the United States compared with the cost of inland transportation in the United States.

The competitiveness of Colombian coal in Florida is based mainly on the low cost of ocean transportation compared with the cost of inland transportation. Imports of Colombian coal into Puerto Rico and Australian coal into Hawaii represent in part a continuation of past practices and in part the cost advantage of those imports over United States coal.

No coal is projected to be imported from either South Africa or Poland because the delivered price of coal from these countries is projected to be higher than the price of either domestic coal or other foreign coal. No other regions of the United States are projected to import coal because the added cost of transportation inland from the port of entry will make the——

Senator WARNER. Let me interrupt you, Mr. Pettis. Those of you who are familiar with this room know of the eccentricities of the sound system. You are doing exactly as I asked, but in such a manner that you are popping the mike. If you will ease back about an inch, you will be all right.

Mr. PETTIS. All right. Thank you.

No other regions of the United States are projected to import coal because the added cost of transportation inland from the port of entry will make the delivered cost of foreign coal higher than that of domestic coal. The 4.8 million tons of imported coal would displace 5 million tons of domestic coal taking into account the difference in thermal content between the imported coal and the displaced domestic coal.

In all of the major coal producing States affected by imports—namely, Kentucky, West Virginia, Wyoming, and Utah—coal production is projected to increase substantially between 1985 and 1995 regardless of the tonnage potentially displaced by imports. Therefore, the impact of displaced tonnage on the growth rate of coal production is expected to be relatively small in those States, as well as in the United States as a whole.

Nationwide, the 5 million tons displaced by coal imports would represent one-half of 1 percent of the total United States coal production in 1995 which is projected to be over 1.1 billion tons, an increase of about 223 million tons over the 886 million tons produced in 1995.

Given the projected increase in total United States coal production, coal industry sales revenues would grow substantially over the next decade. The tonnage displaced by imports translates into a maximum potential displacement of about 990 miners jobs, and $179 million in coal sales in 1985 dollars, with about 2,500 jobs and $389 million in business revenues in 1985 dollars displaced in the United States economy overall in 1995. Displacement in this con-

text refers to foregoing further growth beyond that projected, not a loss from the current level.

To reiterate our summary findings: Continued imports of both Colombian and Canadian coal are likely. However, the magnitude of the flow is projected to be small, 4.8 million tons in 1995, or about one-half of 1 percent of the projected U.S. coal production. The projected markets for these imports are quite confined—Colombian coal to Florida and Puerto Rico, and Canadian coal to the west coast. Some coal production primarily in Kentucky, Wyoming, and Utah could be displaced by imports, but the displaced tonnage would represent only a small share of the projected increase in coal production in these states between 1985 and 1995.

The impacts of coal imports are identified by State rather than by coal-producing region. However, it is likely that other neighboring States in the same coal-producing regions and supplying the same types of coal could share some of the estimated impacts. For example, in the case of Colombian coal imports into Florida, West Virginia, and Virginia may share the impact projected for Kentucky.

Just as any other forecast, ours does not provide unqualified predictions of the future and, hence, may not be realized. Nevertheless, we believe that it provides useful information for policymaking.

Before I conclude, I would like to outline briefly the process that EIA followed in preparing the report. At the outset, we contacted congressional staff, Federal and State government offices, and associations, coal producers, coal importers, railroads, barge lines, and others to encourage their input to the study's content and the process to be followed.

We shared the structure and outline of the report, solicited comments on our assumptions and sensitivities and, as appropriate, received technical comment on the report itself. We opened our approach, data, and report for scrutiny by all to ensure that a quality, useful, and comprehensive report resulted from our efforts.

That concludes my opening statement. We would be pleased to answer any questions the subcommittee may have.

[The prepared statement of Mr. Pettis follows:]

TESTIMONY

ON

U.S. COAL IMPORTS

LAWRENCE A. PETTIS

DEPUTY ADMINISTRATOR

ENERGY INFORMATION ADMINISTRATION

BEFORE THE

SUBCOMMITTEE ON NATURAL RESOURCES DEVELOPMENT AND PRODUCTION

COMMITTEE ON ENERGY AND NATURAL RESOURCES

UNITED STATES SENATE

MAY 1, 1986

Mr. Chairman and Members of the Subcommittee: My name is Lawrence A. Pettis, and I am Deputy Administrator of the Energy Information Administration (EIA). I am pleased to appear before you today to present the results of an analysis by EIA on the forecast for coal imports into the United States and the effect of those imports on the U.S. coal industry. EIA conducted this analysis in response to a congressional request, as specified in the Energy Policy and Conservation Amendments Act of 1985 (Public Law 99-58), Section 203. This analysis appears in the recently released EIA report, Outlook for U.S. Coal Imports.

The United States is the world's largest producer and a major exporter of coal. While retaining the lead in the trading of metallurgical coal, the Nation's coal industry strove to capture and retain a large share of the trade in steam coal that emerged after the oil crisis of 1973 and that is still growing. However, in the years since the record sales of about 35 million tons of steam coal overseas in 1981, our exports of steam coal to overseas markets have been declining, both in terms of market share and in terms of absolute tonnage. Meanwhile, Australia, South Africa, and Poland have been increasing their steam coal exports and have surpassed the United States. The decline in exports of coal from the United States is attributable to many factors,

including the weak demand for coal during the recent worldwide economic recession, oversupply, depressed coal prices worldwide, the strong U.S. dollar, and increased competition from other coal-exporting countries -- competition caused by those market conditions.

The world trade in steam coal seems to have resumed its expansion once again, increasing substantially in 1984 and again in 1985. But many coal-producing countries still have sizable excess production and export capacity and are actively looking for new markets. Moreover, Colombia has recently opened one of the world's largest surface mines and is actively marketing its steam coal worldwide, including the United States. Indeed, small but increasing amounts of foreign coal are already being imported into the United States; imports reached the level of 2.0 million tons in 1985, after having been at only 0.7 million tons in 1982 and 1.3 million tons per year in 1983 and 1984.

The 2.0 million tons imported is a little over 0.2 percent of U.S. coal production in 1985. However, the increasing potential of foreign coal to displace domestic coal has caused concern not only in the U.S. coal industry and among labor leaders but also in the minds of many lawmakers. The principal results of EIA's analysis presented here address these concerns -- what amount of coal imports is likely to come into various domestic markets in 1995 and from what countries, and what effect those

imports could have on domestic coal production, coal-related jobs and income, and overall jobs and income in the U.S. economy and affected States.

General Environment for World Coal Trade

There are many factors that affect world coal trade, including U.S. imports and exports. To aid our analysis of the potential magnitude of coal imports into the United States, we evaluated some of the characteristics of the major coal-exporting and coal-importing countries, as well as the U.S. utility market for imported coal.

The study found that generally there are neither capacity constraints on nor widespread institutional barriers to international coal trade. No major coal-exporting countries (except Poland) subsidize their coal exports heavily, and no major coal-importing countries tax supplies of coal from any source. Although many countries (particularly those that rely heavily on imports) do stress diversification of sources, price is the primary factor in choosing supply sources.

Our analysis of the characteristics of the U.S. utility coal market found that there is a market for high-quality foreign coal -- a market that could expand as current long-term contracts for domestic coal expire. However, this market appears quite limited, because not many U.S. utilities are located on coastal or inland waterways and also equipped with unloading facilities.

World Coal Trade

The potential for foreign coal to make inroads into U.S. domestic markets in 1995 -- the core of this study -- was analyzed in the context of world coal trade. Hence, the analysis reflects not only the interdependence of U.S. imports of foreign coal and U.S. coal exports but also the effects of multilateral coal trade.

In 1984 and again in 1985, worldwide coal trade increased substantially -- in contrast to the lackluster 1981-1983 period -- indicating that a slow but steady expansion has resumed. In view of the most likely trends in the economy and energy demand, the worldwide demand for coal imports during the next 10 years is projected to increase to 455 million tons, from a total of 312 million tons in 1984 (Table 1). Nearly all of this increase is expected to be in the demand for steam coal, which by 1995 is projected to reach 287 million tons -- up from 154 million tons in 1984. Also, nearly all of this projected increase in the demand for steam coal -- more than 90 percent of it -- is expected to be from Western Europe and Asia. By contrast, the demand for metallurgical coal is projected to increase by only 10 million tons, from 158 million tons in 1984.

After projecting the worldwide demand for coal imports country by country, the study assessed the flow of trade between

exporting and importing countries, using the EIA Coal Supply and Transportation Model. This model determines from competitive alternative sources the least-cost supplies for a given demand, based on minemouth prices and transportation costs. Three major, supply-related assumptions underlie the projections of coal trade flows. They are: (1) by 1995, there will be no surplus coal production capacity in the world markets -- in contrast to the large excess capacity of today; (2) between 1985 and 1995, in real terms, U.S. rail rates for transporting coal will increase by 0.6 percent per year on average, while ocean and barge rates for transporting coal will remain constant; and (3) no tariffs or other trade barriers to coal imports will be enacted by the United States.

The EIA analysis does not foresee a supply problem in meeting the expanded worldwide demand for coal imports, because suppliers have excess capacity now for producing and exporting coal, and they can expand that capacity if necessary. The patterns of coal trade projected for 1995 are not significantly different from those of recent years. EIA projects that, while Australia and Canada will continue to sell most of their export coal to the Asian market, South Africa and Poland will export mostly to the European market. The United States is expected to continue exporting to both Europe and Asia as well as to neighboring Canada. Colombia is projected to export coal

primarily to Western Europe and secondarily to the United States.

Some of the highlights projected for 1995 are as follows:

- Australia is projected to export 54 million tons of metallurgical coal and 62 million tons of steam coal, thus becoming the world's largest exporter of steam coal as well as the leader in total tonnage.

- The United States is projected to maintain the lead in the trade of metallurgical coal, exporting 64 million tons, and will remain a major exporter of steam coal, exporting 38 million tons.

- South Africa is projected to increase its exports of coal to 60 million tons, most of it steam coal -- a situation that reflects the South African government's allocation of coal exports.

- Poland's exports of coal are projected to grow only modestly, reaching 54 million tons, because of Poland's own need for coal and because only limited funds are available for expanding production capacity.

- Canada is projected to step up its steam coal exports, reaching 24 million tons, while maintaining its current level of trade with Asia in metallurgical coal.

- Colombia is assumed to mine and export 23 million tons of its Cerrejon North coal, short of its potential 33 million tons, because the current depressed world prices do not provide incentives to expand the capacity of the Cerrejon North mine at full speed.

U.S. Coal Imports

Our analysis of the projected flows of coal trade indicates that a total of 4.8 million tons of foreign coal could come into the United States in 1995 (Table 2). These projected imports include 1.8 million tons of Canadian coal into California and Washington/Oregon for commercial and industrial use, 2.5 million tons of Colombian coal into Florida for use by electric utilities, 0.3 million tons of Colombian coal into Puerto Rico for industrial use, and about 60,000 tons of Australian coal into Hawaii for industrial use. No coal is projected to be imported from either South Africa or Poland.

In 1995, the minemouth prices of Canadian and Colombian coals are projected to be higher, on a per-ton basis, than those of competing domestic coals. Nevertheless, imports of Canadian coal to the Pacific coast States reflect the high thermal content of Canadian coal compared with that of coal from the western United States and the low cost of ocean freight compared with the cost of inland transportation in the United States. The

competitiveness of Colombian coal in Florida is based mainly on the low cost of ocean transportation compared with the cost of inland transportation. Imports of Colombian coal into Puerto Rico and of Australian coal into Hawaii represent in part a continuation of past practices and in part the cost advantage of those imports over U.S. domestic coal. No other regions of the United States are projected to import coal, because the added cost of transportation inland from the port of entry will make the delivered cost of foreign coal higher than that of domestic coal.

To represent the maximum adverse effect of coal imports on the U.S. coal industry, it was assumed that imports would simply displace domestic coal -- that is, that no additional U.S. coal would be exported to fill any of the shortfall in world coal supply that would be caused by the importation of more coal into the United States. Our analysis estimates, for this maximum adverse effect in 1995, that the 4.8 million tons of imported coal would displace 5.0 million tons of domestic coal, taking into account the difference in thermal content between the imported coal and the displaced domestic coal.

Of the 5.0 million tons displaced, Colombian coal is projected to displace 2.5 million tons of Kentucky coal in Florida and 0.3 million tons of coal in Puerto Rico (probably from West Virginia) (Table 3). Canadian coal is expected to replace

1.1 million tons of Utah coal and 0.7 million tons of Wyoming coal in California, and also 0.1 million tons of Washington coal and 0.3 million tons of Wyoming coal in the Washington/Oregon area. In Hawaii, Australian coal is projected to replace a small amount (60,000 tons) of Utah coal, which would be the most economical domestic coal for Hawaii. This forecast assumes that domestic coal supplied under existing contracts that will be in force in 1995 is not subject to competition from foreign coal. Also, it must be noted that other neighboring States in the same coal-producing regions and supplying the same types of coal could share some of the impacts estimated by State. For example, in the case of Colombian coal imports into Florida, West Virginia and Virginia may share some of the impact projected for Kentucky.

In all of the major coal-producing States just mentioned, however, coal production is projected to increase substantially between 1985 and 1995, regardless of the tonnage potentially displaced by imports. Thus, the impact of the displaced tonnage on the growth rate of coal production is expected to be relatively small in those States, as well as in the United States as a whole. Nationwide, the 5.0-million-ton displacement by imports would represent 0.5 percent of the total U.S. coal production in 1995, which is projected to be 1,109 million tons, an increase of 223 million tons over the 886 million tons produced in 1985.

Given the projected increase in total U.S. coal production, coal industry sales revenues would also grow substantially over the next decade.

The tonnage displaced by imports translates into a maximum potential displacement of about 990 miners' jobs and $179 million in coal sales (in 1985 dollars), with about 2,500 jobs and $389 million in business revenues (in 1985 dollars) displaced in the U.S. economy overall in 1995 (Table 4). Displacement in this context refers to foregoing further growth beyond that projected, not a loss from current levels.

To test certain arguments concerning U.S. coal imports and exports, and to allow for some of the uncertainties inherent in our projections, seven sensitivity cases were analyzed in addition to the base case. I will discuss the results of three of those sensitivity cases, as they are more relevant to U.S. imports and exports than are the other cases.

First, if total world coal trade is as low as 412 million tons in 1995, rather than 455 million tons as in the base case, U.S. coal exports are projected to reach only 86 million tons, compared with 102.4 million tons in the base case, and U.S. coal imports are projected to be 7.7 million tons, almost 3 million tons more than in the base case. The additional imports are projected to consist entirely of Colombian coal

coming into Florida, which is projected to increase imports to 5.4 million tons. A smaller Western European market in this low world demand case would not only cause Colombia to sell more coal to the United States but also would cause the United States to export less coal.

Second, if world coal trade is as high as 524 million tons in 1995 and Colombia is assumed to reach its full export capacity of 33 million tons per year, U.S. coal exports are projected to be 106.4 million tons, and imports are projected to be 3.4 million tons, compared with 4.8 million tons in the base case. In this case, it is projected that Colombia would find a larger market in Western Europe, with the result that less Colombian coal would be available to the United States. The United States would not only import less coal but also export more in this high world demand case, compared with the base case.

Finally, if ocean transportation rates are 20 percent higher in 1995 than the base case rates (assumed to remain constant in real dollar terms), it is projected that only 0.8 million tons of foreign coal would be imported into the United States -- 0.3 million tons of Colombian coal to Puerto Rico, 0.4 million tons of Canadian coal to the west coast, and 0.1 million tons of Australian coal to Hawaii. Although Colombian coal would no longer be competitive with domestic coal in Florida, the

higher ocean transportation rates would also result in lower U.S. coal exports, by 1.8 million tons, than their projected level in the base case.

In summary, our analysis indicates a potential for continued imports of both Colombian and Canadian coal in U.S. domestic markets. However, the magnitude of the flow is projected to be small, 4.8 million tons in 1995 (about 0.5 percent of projected U.S. coal production) compared with 2.0 million tons in 1985. The projected markets for these imports are quite confined -- Colombian coal to Florida and Puerto Rico, and Canadian coal to the Pacific coast. Some domestic coal production could be displaced by imports, primarily in Kentucky, Wyoming, and Utah, but the displaced tonnage would represent only a small share of the projected increase in coal production in these States between 1985 and 1995.

Should any U.S. coal producer be negatively impacted by unfair trade practices of foreign coal suppliers, such as dumping or export subsidies, existing laws provide the U.S. Government with a wide range of authorities to deal with coal imports. These laws include the Tariff Act of 1930, as amended, and the Trade Act of 1974. Therefore, any discussion of new authorities or remedies applicable to U.S. coal imports should take into consideration several factors, which include: (1) the magnitude of potential U.S. coal imports, (2) bilateral trade relations,

as well as diplomatic relations, with coal-exporting countries, and (3) the traditional U.S. position in support of a free trade environment.

More important than remedies that could serve as artificial barriers to U.S. coal imports would be the implementation of systems and the promotion of an environment to increase the competitiveness of U.S. coal both at home and abroad.

Just as any other forecast, ours provides neither unqualified predictions of the future nor the exact amount of coal imports that would be realized in 1995. Forecasting coal markets 10 years ahead is an uncertain business, particularly when oil prices are falling drastically and their levels in the future cannot be predicted with confidence. Uncertainty also exists for many other factors that underlie our forecast. However, it does provide an indication of the potential magnitude of coal imports, in light of the various conditions we have examined. We believe, therefore, that our forecast provides useful information for policymaking.

Table 1. World Coal Flows, 1984 and 1995 (Base Case)
(Million Tons)

Exporting Countries	Importing Regions									
	1984[1]					1995				
	Western Europe	Asia	United States[2]	Other[3]	Total	Western Europe	Asia	United States[2]	Other[3]	Total
Steam Coal										
United States[4]	10	3	0	13	26	22	7	0	9	36
Australia	11	19	0	0	30	10	52	*	0	62
South Africa	27	6	1	0	35	55	2	0	0	57
Poland	19	9	*	16	36	23	0	0	19	42
Canada	2	2	*	*	4	2	20	2	0	24
Colombia	0	0	*	*	*	20	0	3	0	23
U.S.S.R.	2	1	0	11	15	0	0	0	22	22
China	*	4	0	0	4	0	18	0	0	18
Other	4	1	0	0	5	0	0	0	0	0
Total	75	57	1	41	154	134	99	5	50	367
Metallurgical Coal										
United States[4]	23	19	0	14	56	30	18	0	17	64
Australia	10	38	0	2	50	10	43	0	1	54
South Africa	*	5	0	0	5	0	9	0	0	9
Poland	6	0	0	6	12	6	0	0	5	11
Canada	1	21	0	1	23	3	21	0	2	24
Colombia	0	0	0	0	0	0	0	0	0	0
U.S.S.R.	1	2	0	5	8	0	3	0	6	9
China	0	1	0	2	3	0	2	0	0	2
Other	1	*	0	0	2	0	0	0	0	0
Total	42	86	0	31	159	47	96	0	32	166
Total Coal										
United States[4]	33	22	0	27	81	52	24	0	26	102
Australia	20	57	0	2	80	20	95	*	1	116
South Africa	27	13	1	0	41	55	5	0	0	60
Poland	25	9	*	22	47	29	0	0	25	54
Canada	2	22	*	2	27	4	40	2	2	48
Colombia	0	0	*	*	*	20	0	3	0	23
U.S.S.R.	4	3	0	16	23	0	3	0	29	32
China	*	6	0	2	8	0	20	0	0	20
Other	5	1	0	0	6	0	0	0	0	0
Total	117	134	1	71	312	180	197	5	82	465

[1] Preliminary data.
[2] Includes 0.3 million tons from Canada, 0.3 million tons from Colombia, 0.1 million tons from Poland, and 0.6 million tons from South Africa.
[3] Other importers are South America, eastern Canada, and Eastern Europe.
[4] Includes 1.8 million tons from Canada, 2.9 million tons from Colombia, and 0.1 million tons from Australia.
[5] Imports from the United States are those reported by the importing countries and do not necessarily agree with U.S. export statistics from the U.S. Department of Commerce, Bureau of the Census. *Monthly Report EM-522*. U.S. steam coal exports in 1984 were 25 million tons as reported in the EM-522 report. U.S. metallurgical coal exports were 57 million tons; total U.S. exports were 81 million tons.
* Greater than zero but less than 0.5 million tons.
Note: Excludes exports from the United Kingdom, West Germany, and other Western European countries.
Note: Totals may not equal sum of components due to independent rounding.
Sources: 1984: Science Applications International Corporation, *Historical Coal Trade Flows in 1983 and 1984* (December 1985). 1995: Energy Information Administration, Coal Supply and Transportation Model projections (1985).

Table 2. Projected U.S. Coal Imports in the Base Case, 1995
(Million Tons)

Exporting Country	Importing State/Region					Total
	Florida	California	Washington/ Oregon	Puerto Rico	Hawaii	
Colombia	3.3	–	–	3.3	–	3.3
Canada	–	1.5	0.4	–	–	1.9
Australia	–	–	–	–	0.1	.1
Total	3.3	1.5	.4	.3	.1	5.3

Note: Totals may not equal sum of components due to independent rounding.
Source: Energy Information Administration, Coal Supply and Transportation Model projections.

Table 3. Maximum Potential Impact on 1995 Coal Deliveries by State, Base Case
(Million Tons)

Demand State and Sector, Supply Region	Change in Deliveries
Florida (Utilities)	
Kentucky	-0.5
Colombia	3.3
California (Industry)	
Wyoming	-.7
Utah	-1.1
Canada	1.5
Washington/Oregon (Commercial and Industry)	
Washington	-.1
Wyoming	-.3
Canada	.4
Puerto Rico (Industry)	
West Virginia	-.3
Colombia	.3
Hawaii (Industry)	
Utah	-.1
Australia	.1

Note: Changes in deliveries are based on a comparison with the Base Case with No Imports.
Note: Tonnages of domestic coal displaced by foreign coal take into account differences in thermal content.
Source: Energy Information Administration, Coal Supply and Transportation Model projections.

Table 4. Maximum Potential Production, Employment, and Income Effects in the Base Case, 1995

State	Production 1993 (million tons)[1]	Production in the Base Case 1995 (million tons)	Production Displaced by Imports 1995 (million tons)	Direct Impacts[2]		Direct and Indirect Impacts[3]	
				Employment (number of jobs)	Income (million 1993 dollars)	Employment (number of jobs)	Income (million 1993 dollars)
West Virginia	127.3	193.8	-8.3	-161	-18.4	-216	-23.6
Kentucky	161.8	186.0	-8.5	-800	-100.7	-1,003	-339.4
Wyoming	187.8	172.1	-1.0	-43	-63.8	-75	-44.5
Utah	12.5	117.5	-1.1	-231	-31.5	-309	-98.4
Washington	4.5	.5	-.1	-31	-10.8	-43	-23.5
Other States	442.3	836.5	0	0	0	0	0
Total	866.1	1,109.8	-8.0	-869	-179.4	-2,525	-389.6

[1] Preliminary data.
[2] Impacts on the mining industry.
[3] Impacts on the economy as a whole.
Note: Tonnages of domestic coal displaced by foreign coal take into account differences in thermal content.
Note: Totals may not equal sum of components due to independent rounding.
Sources: 1993: Energy Information Administration, *Weekly Coal Production*, DOE/EIA-0218(89/35) (February 1995). 1995: Energy Information Administration, Coal Supply and Transportation Model projections. Impact calculations based on coefficients developed by the Bureau of Economic Analysis, U.S. Department of Commerce.

Senator WARNER. Thank you very much.

The one question that I have, the Department of Commerce study last year entitled "U.S. Coal Imports" predicted the possibility of 17 million tons of foreign coal being imported into the United States by 1995. You study includes only 4.8 million in 1995. Can you provide some light on why there is such a dramatically different conclusion from these two people?

Mr. PETTIS. The Commerce study and our study addressed slightly different questions. The Commerce study was more of an impact analysis looking only at what foreign coal might be able to compete in the U.S. market, where our study looked at worldwide coal trade flows, and the multilateral trade that would take place.

Second, our study is based on an equilibrium price for coal—that is, the price at which supply and demand would be balanced over this forecast period, whereas the Commerce study compared 1983 U.S. coal prices, with 1985 foreign coal prices, which were fairly depressed at the time.

Third, our study took into consideration the contracts that are currently in place for domestic coal, whereas this was not considered in the Commerce study.

I think a fourth issue is——

Senator WARNER. I can scarcely hear you up here. Heaven knows what is going on in the back of the room. I know we are having trouble with the mike system.

Mr. PETTIS. The fourth issue is, because the Commerce study did not look at the market for Colombian coal in the other parts of the world, it tended to increase the quantities that could be imported into the United States. I should note that Colombia already has contracts for 5 to 6 million tons of coal in other markets.

Senator WARNER. Thank you.

Senator Rockefeller.

Senator ROCKEFELLER. Mr. Chairman, I just have two questions. One, I do not understand this—and I believe I have asked you this before—but in your study, Mr. Pettis, you have West Virginia down for about 300,000 tons to Puerto Rico, which I am glad of. What I am not so pleased about is we already are selling, or are in the process of about to be selling, a lot of coal to Florida, and you give us no credit for that which makes me wonder why are we not in your study with respect to Florida?

Mr. PETTIS. West Virginia is in the study with respect to Florida, not as large as Kentucky which is the largest supplier of coal to Florida. I believe Kentucky currently supplies about 65 percent of the Florida coal requirements, and our study projects that that would increase to about 75 percent in 1995. I believe I am correct that Kentucky currently supplies to Florida about 10 times the quantity of West Virginia coal.

Senator ROCKEFELLER. You indicated also in your study that the import market, as you put it, is substantially limited by the fact that there are only a certain number of coastal powerplants for inland waterway powerplants. I think you indicate there are about—well, I am not sure, but in the United States we have by our count 22 powerplants that could receive direct shipment of foreign coal, and an additional 102 powerplants that could receive direct shipment of foreign coal with a small transshipment factor.

In other words a small transshipment would be necessary. Now that is a very different import potential market than the one that you are talking about. I do not understand that.

Mr. SCHNAPP. Well, Senator, most of the plants that you are talking about are much closer to the U.S. coal fields and so, as we get closer to the coal fields, the U.S. coal gains an advantage. It costs more for Colombia to get coal there, and it costs less for the United States to get coal to the plant.

Senator ROCKEFELLER. I understand that logic, but the price differential that you exhibit, or that the previous panel exhibited is such that I do not think it would make up the difference unless you can say the transportation is the difference. And if you say that transportation is the difference, then we have something to talk about.

Would you say that $3 to $5, $6 in shipment costs would be the difference between successful competition, West Virginia and Appalachia being able to compete with Colombia? The figures of the previous panel do not show that.

Mr. SCHNAPP. Into what State, though, are we talking about? What the previous panel talked about was a fairly wide range for the Colombian coal, ranging from about $22 at the mine mouth to about $49, I think. So there is quite a large range.

Now compared to the West Virginia coal, they showed a range of about $32 to $35 a ton at the mine mouth. It indicates to me that, if the price dropped below $32, the West Virginia mine would really be out of business compared to the El Cerrejon mine.

What we did in our study was to allow all of the coal to compete worldwide, and allow the prices to rise. Now the price that we have is in the $40 range for a mine-mouth price for Colombian coal. That certainly is within the range that the Commerce study has.

Senator ROCKEFELLER. Would a $3 to $5 a ton, $3 to $6 dollars a ton transportation difference in West Virginia coal make a difference to a mine in competing with the Exxon mine?

Mr. SCHNAPP. If they dropped $3 to $6 a ton?

Senator ROCKEFELLER. Yes.

Mr. SCHNAPP. Yes.

Senator ROCKEFELLER. You believe it would make—if we could reduce the cost of transporting coal by rail, or whatever, by $3 to $6 dollars a ton, you believe that we would better be able to compete with the Exxon mine?

Mr. SCHNAPP. I think so; yes, sir.

Senator ROCKEFELLER. Thank you, Mr. Chairman. Better compete or be beat.

Mr. SCHNAPP. Well, I would have to look at all the numbers to say whether West Virginia would beat out Colombia. That is what you are asking, I assume?

Senator ROCKEFELLER. Yes.

Mr. SCHNAPP. Colombia, as the Commerce study showed, can keep reducing their price down to $22 a ton and still produce, and will produce so that they can try and recover their capital investment. But it is really important to remember on the import question that Colombia at any given point in time is only going to have a given capacity, which certainly is never going to exceed 33 mil-

lion tons. For every ton of coal that they send here, they cannot compete out in the world market.

I am not suggesting that we should import more coal, but I think the amount of coal that they send to the United States and the amount of coal that they send to the world is fixed, the two of them are tied together very closely, and it is very important to remember that. Therefore, if they send more coal to Europe, our exports will probably be lower and the United States industry will suffer. One way or another, we will suffer.

Senator ROCKEFELLER [presiding]. I appreciate that. The chairman has pointed out that we have to conclude this panel by noon, and I think he wants us to go on. I assume he is just outside, but let me thank you gentlemen very, very much.

If I could, I would like to call the next panel, which is Carl Bagge, president of the National Coal Association; Steven Leer, vice president of marketing, Ashland Coal; and Mr. James Van Lanen——

Mr. Chairman, I was just preempting.

Senator WARNER [presiding]. Go right ahead.

Senator ROCKEFELLER. I was just testing the taste of power here—president of ANR Coal Co., Roanoke, VA.

Senator WARNER. Thank you very much.

Well, Mr. Bagge, I am sure we will not have any problem hearing from you.

STATEMENT OF CARL E. BAGGE, PRESIDENT, NATIONAL COAL ASSOCIATION

Mr. BAGGE. Thank you, Mr. Chairman.

I have a formal statement, well written, a very scholarly statement addressing this issue and I would like to present that for the record, and summarize my remarks so you can adjourn by noon.

Senator WARNER. That represents many long years of skilled representation up here, and we appreciate that.

Mr. BAGGE. Thank you, sir.

I am delighted—I applaud your leadership in holding these hearings. I appreciate the opportunity to present my industry's views on the subject of energy imports. I will confine my remarks, however, to the subject of imports of electricity from Canada, since others will deal I hope convincingly and eloquently on the other issue of coal imports.

First, the United States utilities and Canada have been trading power between us for decades, primarily on an occasional or seasonal basis. However, since about 1970 we have seen a roughly sixfold increase in electricity imports from Canada. In 1984 we imported almost 40 billion kilowatt hours, and although this represents less than 2 percent of the total produced in the United States, regional dependencies are significant.

New England, the Pacific Northwest, California, Michigan, and the North Central States are all relatively heavy users of imported electricity from Canada. Furthermore, total imports are projected to continue to grow to almost 44 billion kilowatt hours by 1990, or almost 6 percent of projected domestic utility capacity additions by

that year. This is the equivalent, we are talking here of about 20 million tons of domestic coal.

I believe two fundamental factors are responsible for the surge in imports over the last decade. First is, since the early 1970's we have seen the steady erection of more and more institutional barriers to building new, efficient baseload generating capacity in the United States both nuclear and coal, and power lines to effectively tie that capacity together, barriers brought together by an unwitting alliance of environmentalists and State utility regulators, the PUC's, in unreasonable, expensive, and sometimes impossible regulatory requirements of public utility commissioners and are directly responsible for this impasse in the commitment to baseload generating capacity of both nuclear and coal.

Second, Canadian imports have been priced at about 85 percent of the avoided cost—not the marginal or the incremental cost—but avoided cost, which means 85 percent of the cost of oil in the real world. You could say it is fossil fuel, but in essence in New England they are marketing the electricity at 85 percent of the avoided cost of oil, whatever that oil level happens to be.

Clearly, although it is a slight saving to our domestic utilities, it is not nearly as cheap as power that would have been generated by American coal-fired baseload or nuclear power built in the United States. Mr. Chairman, let me suggest two different ways to think about this issue.

The first is through the perspective of international trade. Indeed, the Canadians are the largest market for United States coal at the same time. They are the largest market we have. However, viewed from—foreign market, that is—viewed from the narrow perspective of the coal industry, the Canadian electric imports have cost us revenue and cost us jobs. Yet, we clearly recognize that this trade has been mutually beneficial to the consuming public in the past, albeit not as beneficial as it could have been because of the pricing policies being pursued by Canada, and the rapid growth in these imports is largely—and I underscore this respectfully—is largely the result of governmental policies in this country which brings this result about, rather than any inherent inability of the United States coal and electricity industry to compete head on with these imports. We believe we can compete head on with these imports.

Second is the sheer economics of these deals. Imports into this country should be priced at or near the marginal costs of providing the additional blocks of power, and that the power should be dedicated to exports. The largest single source, about 45 percent of Canadian imports, comes from hydroelectric power in Canada, which is by far the cheapest source of large-scale electricity.

However, if it is priced as they are pricing it today at the avoided cost of large-scale U.S. coal or nuclear generation, much less oil and gas, this country gains nothing intrinsically from the transaction. I am submitting here that this country gains nothing intrinsically from the pricing policies pursued by the Canadians in the marketing of hydroelectric power to the United States.

Given line losses in transportation, the Canadians hold no advantage over the United States coal-fired generation. That is a funda-

mental fact, and one that policymakers in the Congress ought to take into account.

One potentially serious problem that extends much beyond the concerns of the coal industry and coal labor is the issue of cross-subsidies. The potential is there for using part of the revenues derived from high-priced electricity, not the marginal cost but the avoided cost of oil exports, to cross-subsidize domestic Canadian rates to entice United States energy intensive industries across the border by offering rates and long-term supply contracts that are well below what is available in this country.

I have only anecdotal evidence that such deals are being offered by the Canadians. I am willing to share them, if you are interested, but I have only anecdotal evidence that now the Canadians are offering these kinds of cross-subsidies. They price their power into the United States at the avoided cost essentially of oil or fossil fuel making it appear that there is an incentive to it.

The consumers in this country are hurt by that because it ought to be priced at the marginal cost of producing that block of power. At the same time they cross-subsidize their own Canadian market with a lower price than they are exporting it to us for, at the same time they are trying to induce American industry such as the aluminum industry, heavily dependent electric intensive industries to locate their plants in Canada.

So we are hurt twice. Our consumers are hurt by not a fair shake in the marketing of the price of power in the first place, and being hurt by cross-subsidizing and trying to seduce American industry across the border into Canada.

Senator WARNER. If I might interrupt. As an old jury trial lawyer, I understand direct evidence, circumstantial evidence, and hearsay evidence. Now you have educated me in the twilight of my career with anecdotal evidence. Would you care to—where in the spectrum of evidentiary proceedings would that fall?

Mr. BAGGE. Well, as a legal concept I cannot answer that, but it has become fashionable today because we are using data bases all the time. You cannot talk without a data base, and when you do not have a data base you have got to say I can only rely on anecdotal. It is a term of art that is not a legal term that we use when we do not come to you with a lot of data. It is something that we call anecdotal.

It is a fund of knowledge that exists, but you have to apologize for it because you do not have a big black box that is behind what you are saying.

Senator WARNER. Would you say it is sort of a third cousin to hearsay evidence?

Mr. BAGGE. It is probably a fourth cousin, but it is what you pick up on the street. You know it is true, but you cannot rely on it because you have not got a beltway bandit with a black box who is——

Senator WARNER. Mr. Bagge, I opened the black box with you, and I think we had better go back to the testimony. [Laughter.]

Mr. BAGGE. Thank you. Mr. Chairman, let me summarize finally with a final two points.

First, the Canadian Government and utility executives on both sides of the border have been predicting rapid growth in imports of

Canadian power. Canadian utilities are planning to add more capacity, particularly hydro and nuclear. The recent crashing of world oil prices and energy prices in general will, however, provide it seems to me the first real test of Canadian intentions and actions.

This will be very interesting to observe. So long as oil prices continued to increase and imports were sold at the avoided cost of oil, the economics of exporting more and more Canadian power was overwhelmingly in favor of the Canadians. This is a very interesting and intriguing concept.

With oil prices almost a third of what they were only 6 months ago, will our neighbors to the north be as willing, and this is a serious question, will our neighbors to the north be as willing today with declining oil prices and marketing at avoided cost to build new capacity to serve our markets committed exclusively to the U.S. markets? Or will we continue with spots sales and currently available excess capacity?

If the answer is no, if the Canadians now with declining oil prices and their marketing technique of marketing at the avoided cost of oil, 85 percent of your cost of oil, if they are not going to make the commitments—they were down and talking to the Secretary of Energy just a month ago trying to get commitments from our Government to say that there is no problem with dependency on Canadian electric imports—but now they are waffling. If the answer is no today, I respectfully submit that Canadian imports are of no worth to the United States economy—no worth to the United States economy.

When world oil prices are high, American consumers of this power get hit. And when world prices are low, new supplies are not forthcoming. That is not a very happy prospect for the American consumers and the American industry or American policymakers who have to decide what we are going to do about this.

My final point is that irrespective of world oil prices, imports of Canadian hydropower could be of benefit to the American consumers, but only if two things occur. First, if they come in at incremental or marginal costs, not avoided costs; and second, capacity is dedicated to serve our markets for the long run in committed, uninterruptable contracts.

Unless these conditions are met, I respectfully tell you that I can see very little value in planning our long-range electric energy strategies on the use of Canadian electric imports. Thank you very much.

[The prepared statement of Mr. Bagge follows:]

NATIONAL COAL ASSOCIATION

STATEMENT OF

CARL E. BAGGE

PRESIDENT

NATIONAL COAL ASSOCIATION

IMPORTS OF CANADIAN ELECTRICITY

before the

NATURAL RESOURCES DEVELOPMENT & PRODUCTION SUBCOMMITTEE

of the

SENATE ENERGY & NATURAL RESOURCES COMMITTEE

May 1, 1986

IMPORTS OF CANADIAN ELECTRICITY

Mr. Chairman, I'm Carl Bagge, President of the National Coal Association. I appreciate this opportunity to present the coal industry's views on the subject of energy imports. I will confine my remarks to the subject of imports of electricity from Canada, an issue of great importance not only to the domestic coal producers and their utility customers, but also one that has implications for both the costs of domestic electricity and broader issues of national energy policy, such as national security.

I would like to first touch upon the extent of Canadian electricity imports into the U.S. and then examine the reasons underlying the rapid growth of these imports. Second, I would like to suggest three underlying principles to guide us when examining this complex issue, namely, general principles of free international trade, the economic gains to be realized from this trade, and finally the broader issue of national security and import dependence. Within this context, I would like to then finish with what I believe we should be watching for in the near term with respect to electricity imports to gauge whether they are serving both Canadian and U.S. interests.

First, neighboring U.S. utilities have imported Canadian power for decades, primarily on an occasional or seasonal delivery basis, which makes a great deal of economic sense and is mutually beneficial. However, since about 1970, we have seen a

roughly six-fold increase in electricity imports. In 1984, we imported almost 40 billion kilowatt hours, and, although this represents less than 2 percent of the total produced in the U.S., regional dependencies are significant. Fifty-five percent of these imports went to New York alone, which represents 17 percent of that state's electricity needs. For New England, comparable numbers are 15 percent and 6 percent dependency on imports. The Pacific Northwest, California, Michigan and the North Central states are all relatively heavy users of imported electricity.

Furthermore, total imports are projected to continue to grow, to almost 44 billion kilowatt hours by 1990, or almost 6 percent of projected domestic utility capacity additions by that year. This is the equivalent of about 20 million tons of domestic coal.

Mr. Chairman, what are the driving forces behind this increase? As background, Canadian imports are generally short-term, interruptible sales, although some expect firm contracts to play a larger role in the future. Short-term interruptible sales has been a deliberate strategy of the Canadian government, which allows that country to export large blocks of excess electricity that currently exists in Canada while at the same time making sure that it is not committed when it is needed when the domestic market finally catches up with capacity.

I believe two fundamental factors are responsible for the surge in imports over the last decade. First, here at home, ever since the early 1970s, we have seen the steady erection of more

and more barriers to building new, efficient baseload generating capacity and the power lines to effectively tie that capacity together, barriers brought together by an unwitting alliance of environmentalists and state utility regulators. Unreasonable, expensive and sometimes impossible regulatory requirements and public utility commissions which won't allow utilities to roll into their rate structures the costs of building new plants have driven utilities, especially those in New England and California, which are still heavily dependent on oil, to look to Canada for new sources of energy.

Accommodating this is the pricing policy adopted by the Canadians. Rather than pricing at the marginal cost of the most efficient new domestic power plant such as coal, Canadian imports have been priced at 85 percent of "avoided cost," which means 85 percent of the cost of oil. Clearly, although this represents a slight saving to the domestic utilities whose only choice has been reduced to small increments oil or gas-fired capacity, it is not nearly as cheap as power that would have been generated by American coal-fired or nuclear power. So long as domestic utilities are hamstrung in their ability to build new, baseload plants, reliance on Canadian imports priced at the avoided costs of oil will over the long run create a serious bias in this country's electric generating capacity while at the same time denying us the benefits of a more rationale system.

Mr. Chairman, with this in mind, I would like to suggest that the issue of Canadian imports be viewed in three different

lights. The first is from the international trade perspective. As you know, this country was built upon the principles of free trade and both the U.S. and Canada have prospered from their mutual trading arrangements. Fortunately, these trading arrangements have been largely free of the rancor and stress that has plagued our relationships with many of our other major trading partners. Indeed, the Canadians are the largest market for U.S. coal. Viewed from the narrow perspective of the coal industry, Canadian imports has cost us revenue and jobs. However, we clearly recognize that this trade has been mutually beneficial to the consuming public, albeit not as beneficial as it could be because of the pricing policy being pursued, and that the rapid growth in these imports is largely the result of governmental policies in this country, rather than any inherent inability of the U.S. coal and electricity industry to compete head on with these imports.

A second perspective from which to view the issue of Canadian imports is the sheer economics of the deal. The guiding principle is that imports into this country should be priced at or near the marginal costs of providing the additional block of power and that the terms of the contract be such that the importer is assured that that block of power will be available over a reasonable portion of the life of that plant to allow him to optimize the mix of inputs needed in his production process or to serve his market area. The largest single source, about 45 percent, of Canadian imports come from hydro, which is by far the

cheapest source of large scale electricity. With only a few remaining sites left in this country, it makes economic sense to import Canadian hydro power if it is priced at its marginal cost and offered in dedicated blocks. We would easily concede that portion of the market. However, if it is priced at the avoided cost of large scale U.S. coal or nuclear generation, much less oil or gas, this country gains nothing intrinsically from the transaction. In the case of coal or nuclear generation, given line losses in transportation, the Canadians hold no advantage over the U.S. If any advantage ~~exists, it is~~ because of higher regulatory costs placed on U.S. coal and nuclear plants. If imports from these sources continue to be offered at the avoided cost of oil and on an interruptible basis, we clearly would be better off over time with new domestic coal-fired capacity.

There is, however, one potentially serious problem that extends much beyond the coal industry, and that is the issue of cross-subsidies. In the case of electricity imports, the potential is there for using part of the revenues from high priced electricity exports to cross-subsidize domestic Canadian rates to entice U.S. energy intensive industry such as aluminum, auto manufacture, chemicals, etc. in this country to cross the border by offering rates and long-term supply contracts that are well below what is available in this country. I recognize these are serious charges that could lead to strong actions by our government if such a practice were to emerge. I have only antidotal evidence that such deals are being offered but would caution this

committee to look closely into the issue.

A third perspective is that of national energy policy and where Canadian electric imports fit into the equation. Short-term swaps across the border to gain efficiencies in load balancing etc. are clearly in our best interests. However, the "electrification" of the U.S. economy has continued its steady march since the oil shocks of the 1970s and many are predicting what the next "energy crisis" will be one where domestic generating capacity has fallen short, indeed been prevented, from meeting future demand. There is also a slowly emerging change in the domestic electricity generating industry, with a gradual shifting of players into those that generate large scale blocks of power in the most efficient manner and those who concentrate on marketing that power. Indeed, the FERC is experimenting with incentives to promote more competitive markets through various wheeling arrangements, primarily in the Southwest. Reasonably priced Canadian imports can play a beneficial role, but so long as unreasonable domestic policies and actions on the part of our regulators force large parts of the country to turn to high cost Canadian imports, the U.S. electric situation is worse off.

Finally, is the issue of imports and national security. The extent to which import dependance, both nationally and regionally, becomes a national security issue has been debated endlessly by those with more expertise than myself. Clearly, one percent is not a problem; is 15, 20 or 50 percent? I remember as an old regulator myself at the FPC, the 1969 blackout in New York caused

near panic up and down the entire East Coast. I might add, however, as a caveat, that fundamentally there is no reason why electricity imports must over the long run continue to increase, in contrast to the liquid hydrocarbons that are slowly being depleted in this country. I believe policy makers such as yourself have a much firmer hand in determining the outcome of the issue of electric imports than in the case of oil imports.

Mr. Chairman, let me summarize with what I believe the coal industry and this committee should be watching regarding the future of Canadian imports. First, the Canadian government and utility executives on both sides of the border have been predicting rapid growth in imports. Indeed, despite the fact that excess generating capacity already exists in Canada, Canadian utilities are planning to add more, particularly hydro and nuclear. For example:

- Ontario Hydro is committed to an expansive program which will add 8,000MW of nuclear and 400MV of fossil generating capacity by 1990.
- Hydro Quebec plans to add 7,600MW of thermal capacity and 28,100MW of hydropower.
- The Point Lepreau nuclear facility in New Brunswick (which began testing in November 1982) will sell power to U.S. utilities under a participating agreement and a second unit to be built with U.S. participation has been suggested.
- A 500KW transmission line from Manitoba to Nebraska is

to be completed in 1988.

Not only are the quantities expected to be great, but the proportion sold at firm contract, as opposed to spot sales, is expected to increase. Much has been made of these projections, and no doubt certain domestic utilities are planning on their coming to fruition. The recent cratering of world oil prices, and energy prices in general, however, will provide the first real test of Canadian intentions and actions. So long as oil prices continued to increase, and imports were sold at "avoided costs" of oil, the economics of exporting more and more Canadian power was overwhelmingly in favor of the Canadians. With oil prices at almost a third of what they were only 6 months ago, will our neighbors to the north be as willing to build new capacity to serve our markets, or will we continue with spot sales of currently available excess capacity? If the answer is no, I respectfully submit that Canadian imports are of no worth to the U.S. economy: When world oil prices are high, American consumers of this power get hit and when world prices are low, new supplies are not forthcoming.

My final point, Mr. Chairman, is that irrespective of world oil prices, imports of Canadian hydro power could be of benefit to the American consumers, but only if two things occur. First, the power comes in at incremental, or marginal costs, not "avoided costs" and second, capacity is dedicated to serve our markets for the long run. Unless these conditions are met, I see very little value in planning our long range electric energy

strategies on the use of Canadian imports. Only Canadian exports of dedicated and marginally prices hydro electricity can compete favorably with U.S. coal-fired generation. In the meantime, I would recommend that we turn to the task of untangling the domestic regulatory knot that forces domestic utilities to seek out high priced, short-term supplies of imported electricity.

Thank you very much for hearing the views of the coal industry on this important subject.

Senator WARNER. Mr. Leer.

STATEMENT OF STEVEN F. LEER, VICE PRESIDENT OF MARKETING, ASHLAND COAL CO., INC.; ACCOMPANIED BY THOMAS ALTMEYER, VICE PRESIDENT, GOVERNMENTAL AFFAIRS, MINING AND RECLAMATION COUNCIL

Mr. LEER. Thank you, Mr. Chairman.

I appear today on behalf of MARC. I am vice president of Marketing for Ashland Coal, Inc., headquarters in Huntington, WV. I will briefly summarize my submitted statement.

At the outset, I would like to say that we appreciate the opportunity to appear today and present our views on the issue of ongoing and growing concern for us as coal marketers, and I think coal consumers and electric consumers in the United States—that is, foreign competition in domestic markets.

Foreign competition, whether it be coal from Colombia or electric power from Canada has interjected a new dimension to domestic production and domestic marketing of coal.

At the outset, I would like to state MARC's support for the Coal Trade Equalization Act of 1986, introduced by Senator Rockefeller and cosponsored by Senator Byrd. Senate 2356 provides the coal industry and the Congress an opportunity to evaluate why United States coal is not competitive in selected domestic markets, and to take the necessary steps to make it more competitive.

For its part, the coal industry must continue to identify and implement measures to reduce the cost of mining and increase productivity. Industry has continued to invest new capital in more productive mines and to invest in new technology to increase the productivity at existing mines.

The coal industry has made remarkable strides in the last decade and has survived a continuously shrinking margin between cost and prices by making these necessary investments to increase productivity. Over the past 7 years, production per man hour has gone up over 175 percent at underground mines, and over 145 percent at surface mines.

The coal industry by itself cannot do it all. To maintain and enhance its competitiveness in the domestic and world markets, the coal industry must have: tax policies which encourage investment for productivity improvements; modification or elimination of environmental standards which are unnecessary or are not cost effective; and laws which promote transportation competition and meaningful rate review in the absence of competition. In the face of foreign coal competition, the coal industry simply cannot pass along increased costs, whether it is taxes, productivity, or transportation costs.

In that regard, it is ironic that just when the coal industry is facing increasing competition from abroad, the Congress is considering legislation which would double the Federal tax liability to the coal industry during the next 5 years, and in the process eliminate many of the investment incentives and restrict the cash flow. Should the proposed tax changes be enacted, the industry's ability to generate capital to finance the necessary investments for productivity improvements will certainly seriously be damaged.

Environmental regulation of coal production must be reviewed with an eye toward reducing compliance costs. Two clear examples are presented in my submitted testimony, and they deal with the proposed regulation of fugitive dust from surface mines, and the total elimination of approximate original contour requirements of the Surface Mining Act.

Earlier testimony said that Exxon and Carbocol planned to reclaim similar to the United States. Well, maybe so, but I will be interested to see whether they have any AOC requirements in Colombia. Such regulations increase the noncompetitiveness of United States coal with no real discernible benefit to the environment or to the people living in the community.

A separate undesirable side effect of of many environmental standards is to freeze technological development at the point of promulgation by incorporating design criteria, instead of performance criteria, thereby restricting the ability of the coal industry to utilize new technologies for productivity improvement.

The effect to make the U.S. coal more competitive must include review and scrutiny from a cost effectiveness standpoint of environmental requirements. Perhaps the Congress should require agencies to develop a trade impact statement in addition to an Environmental Impact Statement in evaluating regulatory alternatives.

Specific taxes, exclusive of income taxes, as a percentage of the United States domestic producer's costs range from approximately 10 to 37 percent of the selling price of coal. This process is exclusive of environmental costs and the 12.5 percent and 8 percent royalties respectively paid on surface and underground mined coal on Federal leases. Foreign competitors to the U.S. coal are not generally faced with such specific liabilities as black lung tax, the surface mining fee, and royalty fees.

The Congress must recognize that increasing taxes and royalties directly impacts the competitiveness of coal and may, in aggregate, decrease the absolute revenues available to the Government through decreasing tonnage sold, and increasing foreign tonnage sold in the States. As reflected by the testimony of the utility panel that is coming up after us, contracts today are won and lost on the differences of pennies. It is not dollars, it is pennies in this competitive world.

The last point on specific costs is transportation costs which continue to be a significant factor in the competitiveness of U.S. delivered coal. The Senate and House are considering legislation which is supported by MARC which would enhance the competition for coal movements and, in the absence of competition, assure meaningful rate reviews by the ITC for captive shippers.

Ultimately, however, it is necessary for the coal producers and railroads to continue to work together to reduce the transportation costs to enhance the competitiveness. If they do not, we both lose.

Earlier witnesses have testified on the potential for imported coal use in domestic markets. The recent EIA study and an earlier Department of Commerce report to a lesser degree are premised upon an absence of excess production capacity in the other major coal producing countries in the mid-1990's. My submitted statement outlines several reasons why these assumptions may be wrong and may not be valid in their projections.

The point is that if the assumptions are not correct, and the projections do not prove to be true, imports are very likely to come into this country in substantial quantities. From the perspective of the U.S. coal producer, the most salient information is the powerplants at which foreign coal can be sold competitively since, if the foreign production capacity is available, those producers will be seeking markets and the U.S. market is a doggoned attractive market.

Significant opportunities exist to market coal to any utility accessible by water, either by ocean going vessels or by barges through transshipment.

The EIA report stated that there were approximately 124 powerplants with access to deepwater ports or navigable waterways through either direct or transloading. A rough estimate of the market that that represents would be, in 1984, about 175 million tons of coal. If I was marketing for Colombia or South Africa for Ashland coal, that is the market I would certainly be examining.

In addition, 14 powerplants with access to water will be brought online between 1985 and 1995. That represents an additional market of approximately 200 million tons of coal. I would like to point out that in my submitted testimony there was an error in those, and each one of those should be millions and not hundreds of thousands, as indicated in the written testimony.

The 14 powerplants represent 30 million tons of coal. So as a result, the potential foreign competitor is looking at a market of over 200 million tons of a market, a central market, a good target market. The only real constraint on the ability of foreign coal producers to sell in domestic markets is their ability to produce the coal.

The most important factor, however, on the future levels of importing coal is the response of the U.S. coal industry to the challenge and the willingness of the Congress and the Federal and State governments to take the necessary steps for the coal industry to meet the challenges.

Mr. Bagge brought out several good points on electric imports. I address some additional points in my testimony, but one point I would like to add to Mr. Bagge's testimony is that an EIA report that states that in 1974 imported electric power amounted to approximately 13 gigawatts from Canada, and in 1984 it has gone up to 42 gigawatts. A separate independent report by CIF, an independent consulting firm, estimates imports continuing to increase to 87 gigawatts by 1995. As a rough estimate, 87 gigawatts could represent over 120 million tons of coal-fired power if it was met for domestic producers. Again, a substantial market.

In closing, I would like to say that coal imports and imported electricity from Canada raise policy concerns regarding the future ability of the United States to generate its own domestic power needs with domestic resources in several regions of the country.

MARC encourages the subcommittee and the full committee to further evaluate these trends and the policy considerations they raise. Thank you.

[The prepared statement of Mr. Leer follows:]

Statement
Presented by: Steven F. Leer
Vice President-Marketing
Ashland Coal, Inc.
Huntington, West Virginia

On behalf of the:
Mining and Reclamation Council of America

Oversight Hearing on the Impact of Coal and
Electricity Imports on the Domestic Coal Industry
Subcommittee on Natural Resources Development and Production
Committee on Energy and Natural Resources
United States Senate
May 1, 1986

Mr. Chairman, members of the Subcommittee on Natural Resources Development and Production. I am Steve Leer, Vice President of Marketing for Ashland Coal, Inc., headquartered in Huntington, West Virginia. I appear today on behalf of the Mining and Reclamation Council of America (MARC). MARC is a national association of coal producers and allied industries representing all producing regions of the United States. Ashland Coal, with mines and transportation facilities in West Virginia and Kentucky, is a member of MARC.

We appreciate the opportunity to appear today and present our views on an issue of ongoing and growing concern within the U.S. coal industry--foreign competition in domestic markets. Foreign competition, whether it be coal from Columbia or electric power from Canada, has injected a new dimension to the domestic production and marketing of coal. You and your Subcommittee, Mr. Chairman, are to be commended for your leadership in focusing on this emerging issue.

At the outset, I would like to state the support of MARC for S. 2356, the "Coal Trade Equalization Act of 1986." This legislation, introduced by Senator Rockefeller and cosponsored by Senator Byrd, recognizes the competitive disadvantage experienced by domestic coal producers as a result of their compliance with statutory and regulatory standards to which foreign producers are not subject. S. 2356 implicitly acknowledges that foreign imports jeopardize our national energy policy, evolved through the tumultuous energy decade of the '70s, to enhance national security through maximizing the use of domestic energy resources. S. 2356 would provide the coal industry and the Congress an opportunity to evaluate why U.S. coal is not competitive in selected domestic markets and to take the necessary steps to make it more competitive without sacrificing the achievement of other national policies.

Investment and Productivity

For its part, the coal industry -- both management and labor -- must continue to work together to identify and implement measures to reduce the cost of mining coal and to increase productivity. Unnecessary work rules and practices must be eliminated and efforts must be continued to reduce health care costs. Industry must continue to invest capital in new, more productive mines--and to invest in technologies for enhancing productivity at existing mines.

Remarkable progress has been made by management and labor over the past several years. In spite of an increase in production costs of over 100 percent from 1974 to 1984, in constant dollars the national average minemouth price of coal has declined by 18 percent over the same period. The coal industry has survived this shrinking margin between costs and prices by making the necessary investments to increase productivity. Over the past seven years, production per man-hour has increased 175 percent in underground mines and 145 percent at surface mines. While this is an impressive record, further improvements must continue to be made.

The coal industry cannot by itself, however, take all the necessary steps. To maintain and enhance its competitiveness, the coal industry must have: tax policies which encourage investment for productivity improvements; modification or elimination of environmental standards which are unnecessary or not cost effective; and laws which promote transportation competition and meaningful rate review in the absence of competition. In the face of foreign coal competition, the coal industry cannot simply pass along these government imposed costs to consumers.

For illustrative purposes, assume the recent 10 percent black lung tax increase generally does not favor, or discriminate against, one domestic group of operators as opposed to another. It does, however, disadvantage domestic coal versus imported coal or electricity. A tax increase or regulatory requirement which increases costs favors imports and competing fuels and hurts coal even though many think the increased cost is just passed along to the purchaser.

Tax Policy

In this regard, it's ironic that just when the U.S. coal industry is facing increasing competition from abroad, the Congress is considering "tax reform" legislation which would double the federal tax liability of the coal industry over the next 5 years and in the process eliminate investment incentives and restrict cash flow through reducing the depletion allowance. Should the proposed tax changes be enacted, the industry's ability to generate capital to finance investments for productivity improvements will be seriously damaged.

Environmental Standards

Environmental regulation of coal production must be reviewed with an eye toward reducing compliance costs. EPA recently held a hearing on its proposal to regulate fugitive dust from suface mines. Surface coal mining is responsible for less than 1 percent of all fugitive dust generated annually in the U.S. In spite of this, EPA has singled out surface coal mining for regulation although no adverse health effects exist and only mimimal welfare effects, soiling in areas of close proximity, exist. Should this rule be promulgated, the only available technology for compliance will be to downsize mines by factors ranging from 4 to 30. Such reductions in economies of scale of existing mines and similar restrictions on new mines will exacerbate the non-competitiveness of U.S. coal with no discernible benefit to the environment.

A 1984 report by the National Academy of Science (NAS) has found that total highwall elimination and approximate original contour requirements of the Surface Mining Act are not always necessary from an environmental standpoint and can, in fact, be damaging. Yet coal operators in Appalachia continue to expend substantial resources to completely backfill and eliminate highwalls and to return land to AOC. Modification of these requirements, consistent with the NAS report, would save several dollars per ton in the cost of mining coal.

These examples are raised to emphasize the point that operators have little control over the significant environmental compliance costs which are imposed by law or regulation. A separate undesirable side-effect of many environmental standards is to freeze technological development at the point of promulgation by incorporating "design criteria" thereby restricting the ability of the coal industry to utilize new technologies for productivity improvement.

The effort to make U.S. coal more competitive must include review and scrutiny from a cost effectiveness standpoint of environmental requirements. Perhaps the Congress should require agencies to develop a TIS (Trade Impact Statement) in addition to an EIS (Environmental Impact Statement) in evaluating regulatory alternatives.

Beyond the minemouth cost, the coal purchaser, in evaluating his supply source, looks at the delivered price of the coal including transportation costs, taxes, and fees. These are basically fixed costs over which the operator has little control.

Coal Specific Taxes and Fees

Every U.S. coal operator must currently pay the black lung tax and a surface mining fee for each ton produced. The combined cost of these charges is $1.25/ton for underground coal and $.90/ton for surface mined coal. In addition to FICA, unemployment, severance, and federal and state income taxes the industry is also heavily impacted by the federal fuel and tire taxes. Taxes as a percentage of the coal producer's cost range from approximately 10 percent to 37 percent of the selling price of coal. This cost is exclusive of environmental compliance costs and the 12.5 percent and 8.0 percent royalties respectively paid on surface and underground mined federal coal. Foreign competitors to U.S. coal are not generally faced with such specific liabilities as the black lung tax, the surface mining fee, and royalty fees.

The Congress must recognize that increasing taxes and royalties directly impacts the competitiveness of coal and may, in aggregate, decrease the absolute revenues to the government through decreasing the tonnage sold. As reflected by the testimony of the utility panel today, contracts are won and lost on differences of cents per ton.

Transportation

Transportation costs continue to be a significant factor in the competitiveness of the delivered price of U.S. coal. Legislation, the Consumer Rail Equity Act and trackage rights legislation, supported by MARC, is under consideration in both the Senate and House.

Enactment of these measures would enhance competition for coal movements and in the absence of competition, assure meaningful rate review by the ICC for captive shippers. As a result of recent competition in the Southern Powder River Basin of Wyoming, rates for snippers have decreased as much as $7 a ton. The industry is hopeful that proportionate reductions will occur in other areas as an outgrowth of Congressional action on rail legislation.

Ultimately, however, it is necessary for coal producers and railroads to continue to work together to reduce transportation costs to enhance competitiveness. Existing law promotes contracts. This provision, enacted in the Staggers Act, provides an opportunity for joint interest cooperation. It is imperative for coal shippers and railroads to avail themselves of this opportunity for U.S. coal to be competitive in selected markets. If they don't, both may end up losers.

Coal Import Studies

Earlier witnesses have testified on the potential for imported coal use in domestic markets. While we are not in a position to empirically dispute these findings or to present the results of an independent study, I do want to comment on several elements of recent reports.

The recent Energy Information Agency (EIA) study, and the earlier Department of Commerce (DOC) report to a lesser degree, are premised upon an absence of excess production capacity in the other major coal producing countries in the early to mid-1990's. This projection is based upon a number of assumptions, including the price of oil, which, understandably, EIA projected to rise from $27 per barrel in 1985 to $30 per barrel in constant dollars in 1995. If this does not hold, oil's share of primary energy consumption will be far higher than projected by EIA and excess coal production capacity in the countries most likely to export to the U.S. may well exist. As a consequence of this and other variables, as emission requirements for power plants, it is most difficult to project the likely level of U.S. coal imports in future years.

In this regard, and from the perspective of the U.S. coal producer who is bidding against a foreign supplier, the most salient information is the powerplants at which foreign coal can be sold competitively since, if the foreign production capacity is available, those producers will be bidding in U.S. markets.

The EIA and DOC reports also assumed that existing long-term coal contracts would be honored. While this is the only reasonable assumption to make, recent experience indicates that a number of utilities are seeking to break or renegotiate long-term contracts entered during the energy shortages of the mid and late '70s. Most recently, EIA correctly points out, long-term contracts more closely resemble a series of short-term agreements that can be reopened for price and quantity negotiation every few years.

When coupled with the fact that over 50 percent of existing long-term contracts will have expired by 1995, one begins to recognize that, to the extent foreign producers have excess production available--that is price and quality competitive--significant market opportunities exist to market coal to any utility accessible by water, either by ocean going vessels or by barges through transshipment. As a consequence, significant opportunities for market entry will be presented over the next several years even though long-term contracts with domestic producers ostensibly exist.

EIA's report identified 14 East and Gulf coast ports with the necessary depth, facilities, and proximity to powerplants to receive foreign coal. Several of these ports, along with Sept Iles in Quebec, also serve as gateways to the inland waterway system. Through either direct shipment (22 powerplants) or through transshipment (102 power plants), EIA reports there are 124 powerplants, over 25% of all U.S. coal fired powerplants that are potential targets for foreign coal. These 124 powerplants, with access to deepwater ports or navigable waterways, consumed 174,537 tons of coal in 1984. EIA projects an additional 14 powerplants with access will be brought on line between 1985 and 1995 with an anticipated annual coal consumption of 29,349 tons. As a result, the target market for foreign coal is over 200,000 tons annually, over one-quarter of the domestic utility coal market. Clearly, the potential market for imports is far larger than estimated if utilities choose to consider foreign coal and excess coal production capacity exists in selected foreign countries.

Utilities most likely to solicit bids for foreign coal are those with generating facilities in states which have, or may reduce the sulfur dioxide emission levels from coal fired powerplants. Imported coal generally tends to be lower sulfur coal. In this regard, the Commerce study identified 79 existing powerplants whose coal quality specifications could be met by foreign coal without boiler modification where the calculated delivered price of foreign coal was less than the average cost of domestic shipments. Thus, the only real restraint on the ability of foreign coal producers to sell in domestic markets is their ability to produce the coal.

This is corroborated by both the EIA and Commerce reports which basically concluded that the major constraint on imports into the U.S. would be foreign producers "excess export capacity" which is defined as the capacity remaining after traditional markets have been served. The Commerce study estimated that capacity to be 40 million tons in 1990. EIA did not estimate excess export capacity.

The purpose of the comments on these studies is not to criticize them but to point out, as I am certain the authors would readily admit, that there are tremendous uncertainties in forcasting. Several factors will significantly impact the level of imports the U.S. will actually experience. Beyond those mentioned, the most significant factors are the value of the dollars vis-a-vis the currency of foreign producer countries, production costs

fluctuations, multi-station hydro plants are often designed to assure a constant output of power over the year, much as in our Pacific Northwest. Inter-grid swapping arrangements also help assure constant output in order to allow for long term dedicated commitments of power from hydro.

II. QUESTIONS FROM SENATOR JOHNSTON

(Q) 1. Are you aware of any U.S. companies, other than Exxon, who currently are participating in, or planning, ventures involving the production and importation of foreign coal into the United States?

(A) 1. We are not aware of any other U.S. companies.

(Q) 2. What impact do you believe internal transportation costs have on the competitive position of U.S. coal?

- Do you believe that greater competition in rail transportation could improve the competitive position of U.S. coal?

(A) 2. The National Coal Association estimates that 30 to 40 plus percent of the FOB price of coal is accounted for by internal rail transport costs, while ocean freight and insurance adds only about 5 percent. There is absolutely no doubt that greater competition in rail transportation would improve the competitive position of U.S. coal, particularly in the important European steam coal market.

(Q) 3. The recently issued EIA study ("Outlook for U.S. Coal Imports," DOE/EIA-0483) projects that Colombian coal will, in 1995, displace 2.5 million tons of Kentucky coal used in Florida and 0.3 million tons of West Virginia coal used in Puerto Rico. Canadian coal is expected to displace coal produced in Utah, Wyoming and Washington.

- What do you think Congress should do now to forestall this result?

(A) 3. The recent market penetration of Colombian coal has demonstrated the desire of utilities in this country to diversify supply sources in situations where the railroads hold U.S. producers in such captive situations. There is no inherent reason why domestic coal can't compete favorably with Colombian coal under circumstances where rail rates are competitive. Legislation pending before the Senate S. 477, the Consumers Rail Equity Act and S. 447 the Railroad Anti-monopoly Act would go a long way in securing effective captive shipper protections and rail access which would bring internal rail rates more in tune with actual costs.

One proposal by James Van Lanen, President of Coastal States Energy Company and President of ANR Coal Company, which was briefly discussed at the April 1 hearings, deserves serious consideration. His proposal is for a "last look," in which the U.S. utility, before signing a foreign import contract, would be required to make the terms and conditions of the contract available to domestic suppliers for say 30 days. This would allow pressure to be brought on recalcitrant domestic railroads with market power.

(Q) 4. Do you have available data on the amount of domestic coal displaced by the importation of Canadian hydroelectric power in recent years?

- If so, could you provide it for the record?

(A) 4. Aside from the data presented in our testimony, I believe the most data is from the Departments of Commerce/Energy studies, which were discussed at the May 1 hearing.

(Q) 5. Mr. Bagge's testimony states that total imports of Canadian electricity are projected to grow to almost 44 billion kilowatt hours by 1990, which is the equivalent of energy generated by 20 million tons of domestic coal.

- What impact do you believe this will have on the coal industry?

- Do you believe Congress should take action in this area?

- If so, what action should be taken?

(A) 5. While the macro-effect on the U.S. coal industry will be relatively small, the impact on certain markets such as North Dakota lignites can be quite substantial. With respect to congressional action in this area, we indicated in the answer to Senator Warner's second question that a serious problem exists primarily at the state PUC level. These problems are not easily dealt with on a federal level. Aside from the important tasks of making the U.S. rail industry more competitive and continuing to hack away at the unnecessary and cumbersome federal regulatory policies and practices concerning siting and building domestic plants, I can only recommend that Congress closely monitor the situation, particularly with the rapidly changing world energy price situation, and that serious attention be given to what I believe will be the next "energy crisis" which is power shortages beginning in the late 1980s or early 90s.

Mining and Reclamation Council of America

Suite 525 • 1575 Eye Street, N.W. • Washington, D.C. 20005 • (202) 789-0220

July 28, 1986

The Honorable John W. Warner
Chairman, Subcommittee on Natural
Resources Development and Production
Committee on Energy and Natural Resources
United State Senate
Washington D.C. 20510

Dear Senator Warner:

Enclosed are the additional comments on behalf of the Mining and Reclamation Council of America (MARC) in response to questions submitted from yourself and Senator Johnston in connection with your Subcommittee's hearings on the impact of coal and electricity imports on the domestic coal industry held on May 1, 1986. With the exception of those questions specifically submitted to Mr. Leer, the enclosed responses reflect the views of the Mining and Reclamation Council of America.

MARC looks forward to working with you and your staff on this and other issues of common interest in the future.

Sincerely,

Thomas Altmeyer
Vice President, Government Affairs

TA:jlc
#0b368

Questions for Steven Leer from Senator Warner*

QUESTION 1. The exact percentage of minemouth cost attributable to environmental regulations is not subject to easy calculation. From a cost accounting standpoint, MARC is not aware of any companies which currently can segregate the allocation of fixed and variable cost which comprise the environmental compliance costs associated with various federal and state regulatory programs. Because of the wide diversity of mining conditions throughout the United States and the particular requirements relative to mining in those regions and in specific states, it is not possible to calculate a reliable figure which would represent the percentage of minemouth cost attributable to environmental regulations.

Such information would be invaluable as a decision-making tool for the Members of the Congress and regulatory agencies. Because of the depressed prices for coal and the extremely competitive nature of the industry, it is unlikely that any company at this time would embark upon such a project.

However, the Subcommittee may wish to consider directing the Department of Energy or the Deparement of Interior to conduct such an evaluation for represenative mines from various regions of the country. Should such a study be requested, MARC and its members would provide as much cooperation as feasible in an effort to develop a definitive analysis.

QUESTION 1.** Ashland Coal has not made a detailed study on the specific costs of environmental regulations. The Surface Mining Act and the OSM's or the States' regulatory actions under the Act has increased our costs considerably, but because of its national application, many of those costs also apply to other coal companies operating in the United States. However, I cannot say that coal produced in other countries are also subject to the same environmental regulations.

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* These responses are submitted by the Mining and Reclamation Council of America unless specifically noted.

** Separate response submitted by Mr. Leer specific to Ashland Coal.

QUESTION 2. With the increasing level of competition from competing fuels for power generation, with increasing electricity imports from Canada, and with the increased prospect of additional coal imports into the United States, the coal industry, over the past decade, has made substantial investments in new mines and technologies in order to enhance productivity and thereby reduce the cost of coal. While these investments vary from company to company, generally they reflect the closing of inefficient mines and the opening of new mines with more favorable mining conditions utilizing state of the art equipment and technologies for the extraction of coal and the reclamation of the land following mining. Examples of such investments are the draglines which are now, and increasingly, being utilized not only in the Western coal producing regions of the United States but most recently in the Appalachian coal producing regions; more extensive use of longwall mining in underground mining as opposed to the more traditional room and piller mining method which reduces the percentage of recoverable coal which can be taken from a deep mine; new coal preparation and coal handling facilities constructed to enhance the marketability of coal by reducing extraneous material and increasing the Btu content of the extracted coal; and new loading facilities for shipment by rail or barge which reduce the turn-around time on loading coal thereby reducing the demurrage charges associated with utilizing railroad and barge lines for shipment.

In the area of environmental compliance costs, the coal industry is constrained from utilizing emerging technologies as a result of the imposition of design criteria, in some areas, as opposed to performance standards, by federal agencies charged with responsibility for implementing environmental laws as the Surface Mining Control and Reclamation Act of 1977 and the Clean Water Act. The investments made by the coal industry and new equipment and technologies for extracing coal and reclaiming land responds to the need to reduce the mining cost per ton and to increase the level of productivity per man hour. As you are aware, labor costs remain a significant portion of the cost of mining coal. Through utilizing technology which reduces the number or production workers necessary to mine coal, productivity at the mine can be enhanced.

QUESTION 3. The main factor which has contributed to the 175 percent per manhour increase in productivity at underground mines in the United States is the more extensive utilization of longwall mining as a technology for extracting coal.

QUESTION 4. In suggesting that perhaps the Congress should require agencies to develop a Trade Impact Statement (TIS) in evaluating regulatory alternatives, MARC was seeking to highlight the fact that extensive environmental analysis and potential impact review is conducted by companies, federal agencies, and state agencies prior to a permit for mining coal being issued or, prior to a decision by the federal government to make reserves available for production. MARC was seeking to highlight the fact that regulatory agencies, in exercising their discretionary authority on what requirements to impose upon an industry for environmental compliance rarely if ever take into account, or attempt to calculate, the costs associated with environmental compliance and the impact of those additional costs on the competitiveness of the U.S. coal industry in both domestic and international markets. By suggesting the development of a TIS, MARC was seeking to highlight the fact that some balance must be placed into law to assure that regulatory agencies, in evaluating which regulatory requirements to impose on the coal industry, must take into account the costs associated with such a program and the impact of those additional costs on the viability and competitiveness of the industry. Should such a requirement be imposed by the Congress in various statutes, the TIS would be developed simultaneously with the Environmental Impact Statement.

While the coal industry would hope such a concept as a Trade Impact Statement would never be necessary, unfortunately, the reality the industry faces in attempting to work with regulatory agencies in fashioning environmental compliance programs, is that those agencies rarely, if ever, recognize a responsibility to seriously evaluate and weigh in the decision-making process the impact of additional compliance costs on the competitiveness of the regulated industry.

QUESTION 5. All companies affiliated with the Mining and Reclamation Council of America have been adversely affected by coal imports into the United States. Generally, these coal imports are from countries which either have environmental compliance requirements and labor requirements far less stringent than U.S. law and/or subsidize either the production or transportation of coal from their country in order to expand sales to generate "hard currency." The combined result of those policies is that in many domestic markets the only

constraint upon a country exporting coal to the United States is their ability to produce the coal. Their sales price is often set at a level which would ensure that the coal is more competitively priced than comparable U.S. coal.

Fortunately, those coal producers in foreign countries have been able to maximize their return on coal sales from selling to markets other than the United States; and, since they are basically capacity-constrained, do not have excess production available to market in the United States. However, should the excess production capacity for coal worldwide continue to increase or should the worldwide market for coal not expand as projected, that excess capacity will seek markets in the United States. Since that coal, as noted above, is not always priced to assure a reasonable rate of return to the producing mine but is sold to generate hard currency for the exporting country, the price will often be lower than a U.S. coal company is able to deliver coal. The impact of such pricing policies in the domestic U.S. market will be to continue to force the delivered price of coal down. This impact on prices is currently being felt in all coal producing regions of the United States as a result of foreign coal directly competing for markets served by that producing region and/or foreign coal obtaining contracts to sell coal to selected regions and thereby forcing coal that would otherwise be sold to those regions into other markets.

#0837B
7/28/86

Additional Questions for Steven Leer from Senator Warner

QUESTION 1.* The initial request by Jacksonville Electric Authority for bids resulted in responses from over 100 companies. The bidding was extremely competitive, and I believe no coal company felt assured it would win the contract. Ashland Coal offered prices it believed would win the contract, re-evaluating those prices several times as we allowed within the parameters of the phased bidding process. The transportation companies, both rail and water, negotiated their bids separately to JEA. However, it should be said that CSX worked diligently to make its transportation rates very competitive. It was the combination of bids by CSX and Ashland Coal that resulted in the contract award to Ashland Coal.

QUESTION 2.* Tax incentives are extremely important to investment decisions. Ashland Coal's decision to invest over $30 million dollars to expand its Logan County, West Virginia, coal mining operations was directly influenced by West Virginia and Federal tax incentive provisions. A West Virginia program, called the "Super Credit" law, allows tax credits for investments which create West Virginia jobs. Ashland Coal's investment will create over 120 new West Virginia jobs. At the Federal level, the investment tax credit provisions were also key inputs to our decision. Without the availability of the West Virginia "Super Credit" provision and the Federal investment tax credit laws, Ashland Coal would not have made the investment.

QUESTION 3. The precipitous decline in oil prices over the past several months is likely to impact the level of coal into the U.S. Increased use of oil for power generation in foreign countries will result in a decline in their importation of coal. This decline, which will impact those countries purchases of coal from South Africa, Poland, and Columbia will result in coal produced in those countries seeking new markets. It should be expected that producers in those countries will seek to sell that displaced coal, in part, in the U.S. domestic market.

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* Questions Number 1 and 2 were specifically answered by Mr. Leer.

#0849B
7/28/86

Questions Submitted for the Record from Senator J. Bennett Johnston

QUESTION 1. MARC is not aware of any U.S. companies, other than Exxon, who are currently participating in ventures involving the production and importation of foreign coal into the United States. Several U.S. coal companies, however, hold the rights to obtain leases for coal tracts in foreign countries and may seek to develop that coal. The likely market for that coal, however, is not the U.S. market but primarily the Pacific Rim and European market.

QUESTION 2. MARC strongly believes that greater competition in rail transportation would improve the competitive position of U.S. coal. Approximately, 65 percent of all coal mined in the United States is captive to railroads for movement to market. The delivered price of U.S. coal to a utility customer in the United States can range as high as 70 percent of the delivered price of the coal. U.S. coal producers have no ability to significantly impact the cost of transporting coal to its customers. Coal producers are totally at the mercy of the railroads with respect to whether they will be the successful bidder on a coal sales contract. Increasingly, coal producers, because of their inability to negotiate transportation charges for coal, are merely contract miners for the railroads for whom they are captive.

QUESTION 3. The Congress, in addressing the spectre of increased coal imports into the United States, should systematically evaluate all laws which impact the cost of producing and transporting coal and revise the provisions of those laws to assure that the environmental objectives outlined in the laws impacting production; the safety and health objectives outlined in the laws regulating mine safety and health conditions; and the laws impacting competition for transportation of U.S. coal and federal oversight of such transportation rates in the absence of competition, are modified to ensure that the national policy objectives reflected in those laws are being achieved at the least cost on the production and transportation of coal. Separately, MARC's Board of Directors has endorsed legislation introduced by Representative Rahall in the House of Representatives and Senator Rockefeller which would impose a tariff on coal imported into the United States from countries whose environmental and labor standards are not comparable to those found in the United States.

QUESTION 4. The data available to MARC on the amount of domestic coal displaced by the importation of Canadian hydroelectric power in recent years is reflected in its submitted statement for the record. MARC encourages the Committee to further pursue this issue through additional hearings on the policy concerns raised by increased reliance on Canadian power imports into selected regions of the country and encourages the Committee to direct the Department of Energy to conduct an evaluation of the current and projected levels of power imports into the United States and the interrelationship of such imports to the achievement of national energy policy.

QUESTION 5. The impact of increased Canadian electricity imports into the United States will be a reduction in the projected market for coal and a continuation of depressed prices for the sale of domestically produced coal. Although not universally true, a number of U.S. coal producers are selling coal at a price marginally above their variable costs with no contribution to fixed costs. Producers are making such sales to generate cashflow to meet their debt obligations. Obviously, such sales cannot continue for an indefinite period. As a result, an increasing number of bankruptcies should be expected in the coal industry.

Over the tumultuous energy decade of the 1970's the Congress enunciated a national energy policy which sought to strive for energy independence through reducing reliance on imported oil and enhancing the domestic production of energy. The increasing level of imports of power from Canada is inconsistent with achievement of those objectives. While Canada is the most stable and reliable of the historical allies of the United States, we should anticipate that, if a calamity impacts Canada comparable to the calamities which impacted the Mideast in the 1970's--Canada, as a separate soverign jurisdiction, would have a responsibility to first meet the demand for power of Canadian citizens and industry. Such a policy could jeopardize the availability of power to the residential and industrial users in the power importing regions of the United States. While it is difficult to plan policy in anticipation of untoward events, the Congress cannot ignore the fact that untoward events have occurred with increasing regularity over the past fifteen years. Such an untoward event could be problems associated with Canada's nuclear industry or a natural event as a reduction in the amount of power generated through hydroelectric facilities.

We must also not lose sight of the fact that the Canadians, when the U.S. was faced with an energy shortfall in the mid-1970's, chose to dramactically increase the price it charged for natural gas from Canada in response to the world energy shortfall. Specific provinces in Canada, in the past, have unilaterally and dramaticallly increased their charge for exported power to the United States when they have experienced a reduction in generating capacity. In this regard, I would reference you to the experience of the Bonneville Power Administration in purchasing power from British Colombia Hydroelectric in the 1970's. While MARC does not specifically advocate any Congressional action at this point in time, MARC strongly believes that this issue should be carefully evaluated and analyzed by the Congress with a view toward determining whether action should be taken in this area.

#08388
7/28/86

ANR Coal

ANR COAL COMPANY
P.O. BOX 1871 • ROANOKE, VIRGINIA 24008 • (703) 342-1801

June 24, 1986

The Honorable John W. Warner
Chairman, Subcommittee on Natural
Resources Development & Production
United States Senate
Washington, DC 20510

Dear Senator Warner:

Enclosed please find my responses to the questions raised by you and Senator Johnston based on my May 1, 1986 testimony before your subcommittee.

I am hopeful that these answers will assist you in further determining the overall impact of imported coal and electricity. If I may be of further assistance, please do not hesitate to contact me.

Very truly yours,

James L. Van Lanen
President

JVL/ale

Enclosure

Response to Senator John W. Warner

1) Answer:
The Staggers Rail Act facilitates the "last look" concept because it permits the rail carriers to enter into contracts for special rail services under specified rates. This means that the railroads can help American coal become more competitive by adjusting their rates to meet a specific target.

2) Answer:
The following six plants in Virginia would be readily accessible to imported coal:

Potomac Electric Power Co.
Potomac River Generating Station
Alexandria, VA

Virginia Electric and Power Co.
Bremo Bluff Plant
Bremo Bluff, VA

Chesterfield Plant
Wheelwright, VA

Portsmouth Plant
Norfolk, VA

Possum Point Plant
Dumfries, VA

Yorktown Plant
Yorktown, VA

In response to Part B of your question, the 119 utilities which Hill & Associates identified are located on the East Coast, Gulf States, Inland Waterway System, Great Lakes and the West Coast.

3) Answer:
The major non-competitive barriers are:
(1) The monopolistic characteristics of the U.S. railroad industry
(2) The economic penalties imposed by Jones Act requirements that American vessels be used between American ports.
(3) The burden of environmental costs that must be paid by American producers.

4) Answer:
Both of the foreign bidders were from Columbia.

5) Answer:
The loss of the 1 million ton per year JEA contract will cost ANR Coal Company as many as 160 direct mining jobs and the local community 320 indirect jobs. The exact number of jobs lost will depend on the extent to which we can replace part or all of this tonnage lost to imports. We do not foresee any near-term opportunities to substitute other new business for the Jacksonville business. However, even if some of this business is eventually replaced, there would be a lost opportunity to reduce the high unemployment in the coalfield regions which would occur if production levels were increased to supply both the Jacksonville business and the partially substituted business.

6) Answer:
Yes, we have discussed the "last look" concept with a number of these groups and the reactions have been very favorable. They have noted that it will not cost the consumer anything and may in fact result in an overall benefit to the consumer. At the same time, "last look" will be helping the U.S. coal industry and railroad industry.

- Railroads and barge companies see it in their best interest as it represents another chance at obtaining new business which would otherwise be lost to imports.

- Utilities have not been contacted.

Response to Senator J. Bennett Johnston

1) Answer:
We are reluctantly investigating the importation of coal. If action, such as the proposed legislation, is not taken to give the American coal industry a fair chance, we will have to protect our own interests by going into the importing business.

2) Answer:
Internal transportation costs are, in my opinion, the single biggest factor contributing to the inability of American coal to be competitive with imports. Consequently, I believe greater competition in rail transportation would improve our competitive position. Something also needs to be done to reduce the costs of inter-coastal vessel movements. In many instances, this is a major cost component in the total transportation package and therefore, the operators need the ability to become more competitive.

3) Answer:
The first step "to forestall this result" is adoption of the "last look" proposal. The next step would be adoption of the Rail Anti-Monopoly Act. The third step would be some sort of legislation to modify the Jones Act so the cost of American intercoastal movements would be more competitive.

QUESTIONS FOR MR. JAMES VAN LANEN

ANR COAL COMPANY

FROM SENATOR WARNER

1). Jim, could you tell us if your "last look" proposal affects the Staggers Rail act in any fashion? If so, how?

2). According to the Hill and Associates study, 119 U.S. utility plants will be readily accessible to imported coal by 1990. Can you estimate how many of these 119 plants would be in Virginia?

a) Where would these plants be located?

b) Are all of these 119 utilities located on the East Coast and the Gulf states?

3). In your testimony you make the point that a rational government should reduce or eliminate any non-competitive barriers which limit the ability of our coal to compete. Would you list all of the non-competitive barriers you feel Coastal Coal Company must experience in competing with foreign coal producers?

4). On page 7 of your testimony, you state Jacksonville Electric Authority has a list of 7 suppliers bidding for 3 million tons of coal per year, 5 domestic and 2 foreign. Aside from Colombia, can you tell me the country of the other bidder?

5). How will the loss of the JEA contract to Colombia affect your company? Will there be employment reductions as a result?

6). Have you discussed the "last look" proposal outlined in your testimony with utilities, railroads and water borne shippers? If so, what was their reaction to the proposal?

Oversight Hearing on the Impact of Coal and Electricity Imports on the Domestic Coal Industry

Submitted for the Record from Senator J. Bennett Johnston

Questions for Panel III

(1) Are you aware of any U.S. companies, other than Exxon, who currently are participating in, or planning, ventures involving the production and importation of foreign coal into the United States?

(2) What impact do you believe internal transportation costs have on the competitive position of U.S. coal?

- Do you believe that greater competition in rail transportation could improve the competitive position of U.S. coal?

(3) The recently issued EIA study ("Outlook for U.S. Coal Imports," DOE/EIA-0483) projects that Colombian coal will, in 1995, displace 2.5 million tons of Kentucky coal used in Florida and 0.3 million tons of West Virginia coal used in Puerto Rico. Canadian coal is expected to displace coal produced in Utah, Wyoming and Washington.

- What do you think Congress should do now to forestall this result?

(4) Do you have available data on the amount of domestic coal displaced by the importation of Canadian hydroelectric power in recent years?

- If so, could you provide it for the record?

(5) Mr. Bagge's testimony states that total imports of Canadian electricity are projected to grow to almost 44 billion kilowatt hours by 1990, which is the equivalent of energy generated by 20 million tons of domestic coal.

- What impact do you believe this will have on the coal industry?

- Do you believe Congress should take action in this area?

- If so, what action should be taken?

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Bob-If your ...

HLC

[3/12/86 DISCUSSION DRAFT]

99TH CONGRESS
2D SESSION

H. R. ____

IN THE HOUSE OF REPRESENTATIVES

Mr. ------- introduced the following bill; which was referred to the Committee on _____

A BILL

To amend the Clean Air Act to reduce acid deposition and for other purposes.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,

SECTION 1. SHORT TITLE.

This Act may be cited as the "Coal Free Market Opportunity Act".

SEC. 2. FINDINGS

[To be supplied]

SEC. 3. PUBLICATION OF INTENTION TO PURCHASE FOREIGN COAL.

Before any person may purchase any amount of coal in excess of 50,000 tons from a source outside the United States, such person must publish in a publication widely read by the coal industry in the United States a statement expressing the intention to purchase such coal and setting forth--

(1) the specifications for the coal and the quantity to be purchased

(2) the delivered price as measured in ¢/MMBtu of the foreign bid;

(3) the portion of such price that is for commodity;

(4) the portion of such price that is for transportation;

(5) any other significant terms and conditions of the foreign bid; and

(6) The name, address, telephone number and other appropriate information identifying the party responsible for the purchase of the coal.

SEC. 4. DOMESTIC BIDS.

Not sooner than 30 days after the publication required under section 3, the person intending to purchase coal shall publish, in the same manner as under section 3, a comparison on a ¢/MMBtu basis of the foreign bid and any domestic bids received during such 30-day period.

SEC. 5. PURCHASE.

(a) IN GENERAL.--After the expiration of 10 days after the publication required under section 4, the person intending to purchase coal shall, except as provided in subsection (b), purchase coal from any supplier. Failure to make such a purchase will subject the person to the fine set forth in section 6.

(b) RESTRICTION FOR SALE OF POWER TO UNITED STATES.—If any power generated from coal purchased under this Act is to be sold to any representative or entity of the United States Government, such coal must be purchased from the domestic supplier submitting the most favorable, on a ¢/MMBtu basis, domestic bid received so long as that bid is equal to or more favorable, on a ¢/MMBtu basis, than the foreign bid.

SEC. 6. ENFORCEMENT

Any person purchasing coal in violation of this Act shall be liable for a fine assessed by the Secretary of the Interior in an amount equal to 10 percent of the value of the contract.

FLORIDA POWER & LIGHT COMPANY

June 30, 1986

The Honorable John W. Warner
Chairman, Subcommittee on Natural
Resources Development & Production
United States Senate
Washington, D. C. 20510

Dear Senator Warner:

In response to the questions propounded in your letter of May 20, 1986, regarding coal imports, the following information is provided:

Q. I note in your statement that you began the final solicitation process with 108 prequalified coal suppliers and narrowed that to the current three. This resulted in a savings of approximately 75 million over the lowest all-rail option. Was there an option of rail and water that might have achieved similar savings?

A. The option chosen by the project which resulted in contract awards to Ashland, Shamrock, and Intercor is, in fact our lowest cost option utilizing both rail and water delivery. Of the twenty-seven procurement scenarios we analyzed that considered various combinations of our Phase III suppliers list, the top sixteen scenarios involved the combination of rail-water deliveries while the remaining eleven scenarios only allowed us to receive coal by rail.

Q. Did you notice any downward movement in rail rates as you proceeded through your procurement process?

A. Minimal movement in rates or terms (incentive discounts, etc.) was noted until the railroad was told that we were definitely going to build a port and that they would be competing with the water carriers in a sealed bid. The railroad repeatedly told the project that they wanted to eliminate all water options we had and obviously quoted to us accordingly until we confirmed we would build a port. From this point, a very small drop in base tonnage rates was received from them, but substantial increases in tonnage discounts, reductions in guaranteed turnaround times, and improved contract terms allowed them to gain a substantial portion of our business.

Q. On page 8 of your statement, you refer to the weighted average delivered cost of the three coals currently under contract as $1.71/MMBTU at the time of contract execution. You also indicate that this figure excludes, among other things, the capital cost for railcars, the coal handling equipment required at the plant for rail delivered coal, and so forth. Can

you tell me what the cost would be had these factors been included?

A. As noted in our testimony, the evaluation of all potential coal suppliers' bids was based on a fifteen-year present worth analysis of the fuel cost which included percentage of fixed price, escalation provisions and burning adjustments and was not based on a short term market analysis. The $1.71/MMBTU figure was calculated for informational purposes only to compare our delivered price for fuel received to other southeastern utilities. Capital expenditures for transportation and unloading facilities was not included in the analysis, but, if it were, the weighted average delivered cost of the three contracted coals, including the capital cost for railcars, unloading facilities, etc., would be approximately $1.92/MMBTU.

Please let me know if I can furnish any other information concerning these questions.

Very truly yours,

Tracy Danese

Tracy Danese
Vice President

TD:mh

New England Energy

New England Energy Incorporated
25 Research Drive
Westborough, Massachusetts 01582
Tel. (617) 366-9011 TWX 710-390-0732
Cable: NEELECSYS WTBO

Glenn R. Schleede
President

July 1, 1986

The Honorable John W. Warner
Chairman
Subcommittee on Natural Resources
  Development and Production
Committee on Energy and Natural Resources
U.S. Senate
Washington, DC 20510

Dear Mr. Chairman:

Enclosed, in response to your May 20, 1986, letter, are responses to questions concerning coal imports.

I hope the information and views presented during your May 1, 1986, hearing and the enclosed responses will help put in perspective the matter of coal imports.

As indicated during the hearing, coal imports are a minor problem compared to the very serious problems facing the U.S. coal industry. The most serious overall problem is making and keeping U.S. coal competitive in domestic and foreign markets, and that problem will not be solved by adopting protectionist measures.

Instead, steps must be taken to reduce the costs of producing, transporting and using U.S. coal. The most serious problem on the agenda is, without doubt, finding a way to achieve reasonable rail rates for moving coal.

Excessive rail rates are a most serious problem in your own state of Virginia. Because of excessive rail rates, our company has reduced the amount of coal shipped on the N&W (much of which was mined in Virginia, but some in southern West Virginia) from more than 1.8 million tons in 1984 to an annual rate of less than 1 million tons effective July 1, 1986. Clearly, high rail rates are reducing markets for coal produced in your state.

The puzzling point to us is that this problem seems to be recognized but virtually nothing is being done about it. Instead, time and effort is being devoted to minor problems.

Respectfully,

Glenn Schleede

Enclosure

Enclosure

SCHLEEDE RESPONSES TO QUESTIONS FROM CHAIRMAN WARNER

Question 1:

Q: Mr. Schleede, you mentioned New England Energy has not yet tested a cargo of coal from Colombia. Do you have any intentions of acquiring Colombian coal in the future to test burn? Do you know why the price offers received from Colombian coal suppliers are not yet competitive?

A: There is a very good possibility that we will test Colombian coal -- providing that we can obtain Colombian coal at a delivered cost that is competitive with the delivered cost of coal available from U.S. sources.

We have no preference for foreign coal. However, we have an obligation to our customers to obtain coal meeting our needs at the lowest delivered cost -- whether the source is foreign or domestic. Also, it is important that we have experience with coal from all practical sources in the event that the supply from any particular source is interrupted.

We believe the principal reason why the price offers from Colombian suppliers are not yet competitive is because they have not yet adjusted their marketing practices to the very sharp drop that has occurred in the mine prices of coal from U.S. sources. Mine prices for coal under new contracts and spot purchases in the U.S. have dropped more than $5 per ton since the first of the year.

Question 2:

Q: Your statement says Canadian mines enjoy relatively low operating costs. What are these operating costs and why are they lower than U.S. operating costs?

A: We do not know specifically the operating costs of Canadian mines. We purchased the coal on a delivered basis and, therefore, do not have information on the costs of the coal at the mine (including operating costs), or for rail and water shipment. However, we believe the operating costs are low at the mine from which we obtained our coal for several reasons, including:

- The mine is a surface mine.
- The mining company is removing the top of a mountain that contains 15 seams, most of which are very thick. There is a relatively low overburden-to-coal ratio -- which helps keep down mining costs.

. The mine has a very efficient facility for loading rail cars -- loading cars in motion at a rate of 100 cars in less than 4 hours.

Many U.S. mines, particularly in the East, do not enjoy these characteristics.

Question 3:

Q: Does the Canadian Government subsidize their rail transportation in any way? If so, doesn't this create an unfair advantage for Canadian coal competing with U.S. suppliers?

A: I do not know whether the Canadian Government subsidizes rail transportation. However, it should be recognized that Canadian rail rates are likely to be lower than U.S. rates for two principal reasons:

a. The Canadian Pacific, which moved our coal, is a highly efficient railroad.

For example, the 780 mile trip from the mine to the ship loading terminal (Roberts Bank) in Vancouver takes approximately 48 hours. In effect, the unit train stays in motion for the entire trip, with extra power added to move the train over two mountain ranges.

By contrast, it may take our coal from Appalachian States 5 days or longer to move to East Coast ports. Considerable switching, changing of crews and other inefficient steps contribute to the delays.

b. In the U.S., rates charged by railroads for moving coal often include a cross-subsidy for other commodities. Until something is done to bring down excessive rail rates for hauling coal in the U.S., coal from domestic sources will be at a disadvantage with foreign coal.

Question 4:

Q: What impact will fuel switching away from coal have on coal imports into the U.S.?

A: Whether fuel switching away from coal has an impact on coal imports will probably depend heavily on:

a. The extent to which U.S. coal suppliers and railroads reduce the amounts they charge and stay competitive with oil, gas and imported coal.

b. The location of plants involved -- since plants located on coasts and major waterways are in the best position to take advantage of lower cost imported coal.

c. The extent of fuel switching -- which, in turn, will depend on the level of oil and natural gas prices. During the past few months, oil and natural gas prices have declined enough to:

   . Result in the loss of some "coal by wire" sales from utilities that have excess coal-fired generating capacity to utilities that have unused oil-fired capacity. It has become cheaper for some such buying utilities to burn oil.

   . Result in some backing down of coal-fired generation in power pools where facilities are centrally dispatched and the units with lowest fuel costs are dispatched first.

   . Result in some substitution of gas-fired generation for coal because the utility(ies) involved were able to obtain low cost gas and restart gas-fired generating units at a cost to customers below that of continuing to run new coal or lignite-fired facilities that had been substituted for the gas-fired plants.